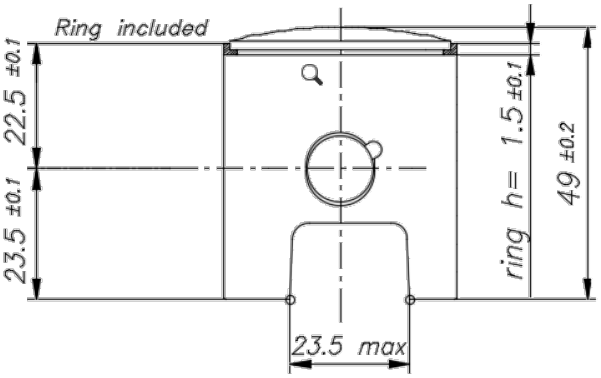
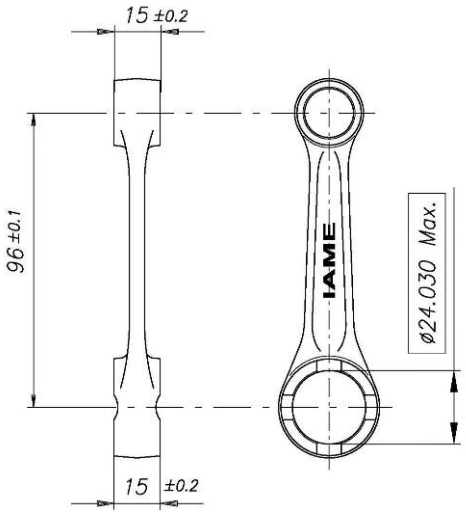
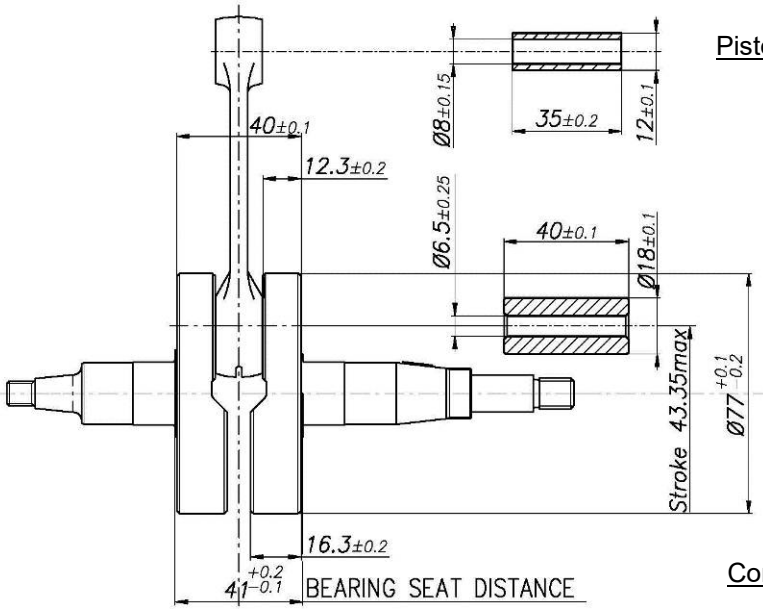
GAZELLE 60CC – IRELAND

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

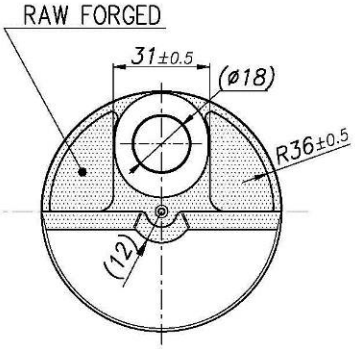
Tillotson Carburettor	HL 394A Ø16mm	Cylinder/crankcase transfers n°	2
Number of piston rings	1	Inlet/exhaust ports number	1 / 2
Big end conrod ball-bearing diameter	18x24x15	Combustion chamber shape	Spherical
Crankshaft ball-bearing diameter	20x47x14	Selettra ignition	Code A-61953-C
Small end conrod ball-bearing diameter	12x16x16	Distance between conrod centers	96 mm

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

CRANKSHAFT

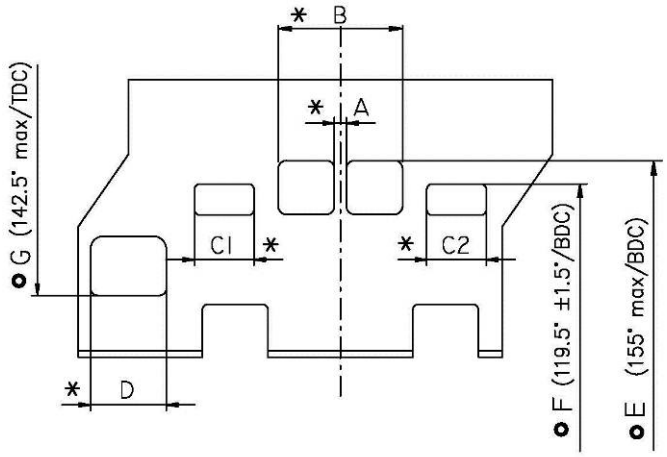


Piston pin min. weight = 15.5g



Complete crankshaft min. weight = 1190g

CYLINDER DEVELOPMENT

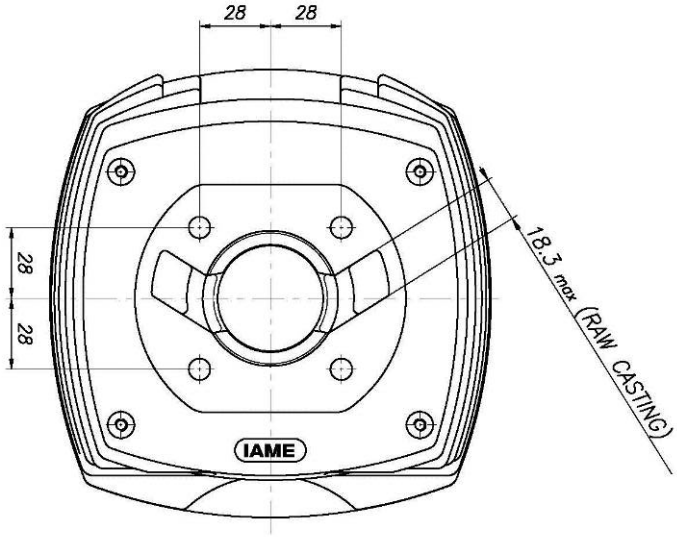


A	4.0 ±0.2 mm
B	34.0 ±0.2 mm
C1 = C2	17.6 ±0.4 mm
D	25.0 ±0.2 mm
E	155° max
F	119.5° ±1.5°
G	142.5° max°

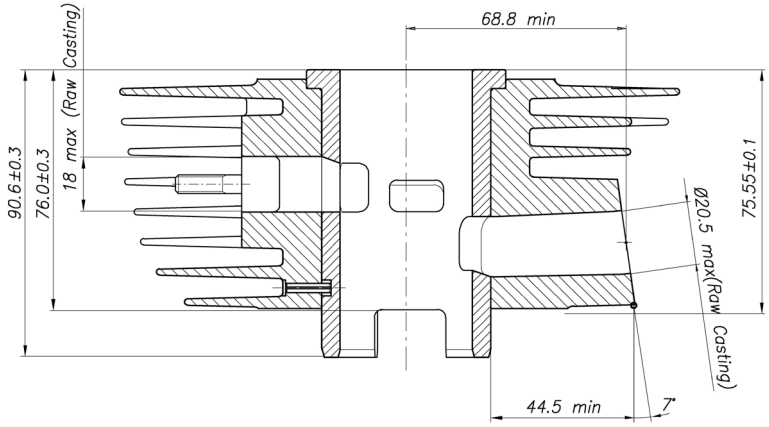
* CHORDAL READING

o ANGULAR READING BY INSERTING A 0.2x5mm GAUGE

CYLINDER BASE VIEW

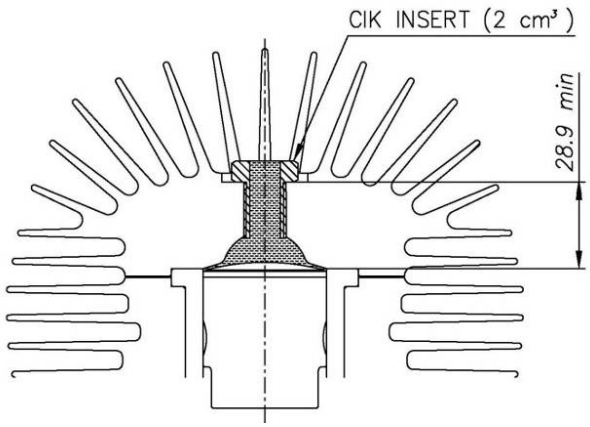


CYLINDER CROSS SECTION VIEW



GASKET MANDATORY BETWEEN CRANKCASE AND CYLINDER
- free thickness -

COMBUSTION CHAMBER VIEW



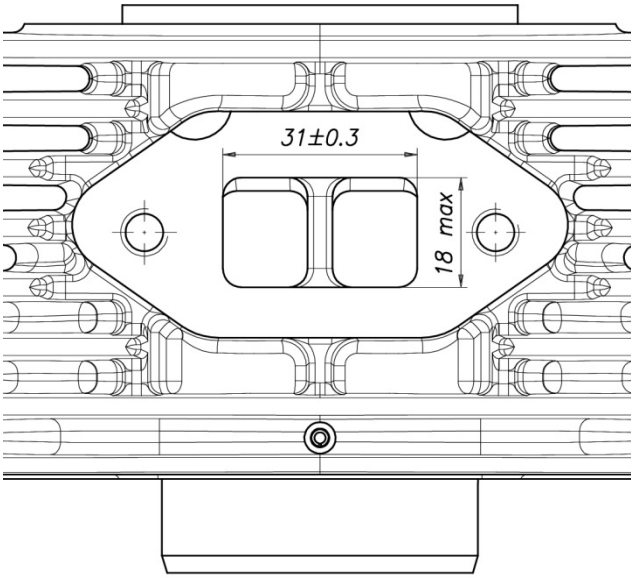
COMBUSTION CHAMBER VOLUME = 6.1 cm³ min.

SQUISH MIN.= 0.50 mm (measured with Ø1.6mm TIN)

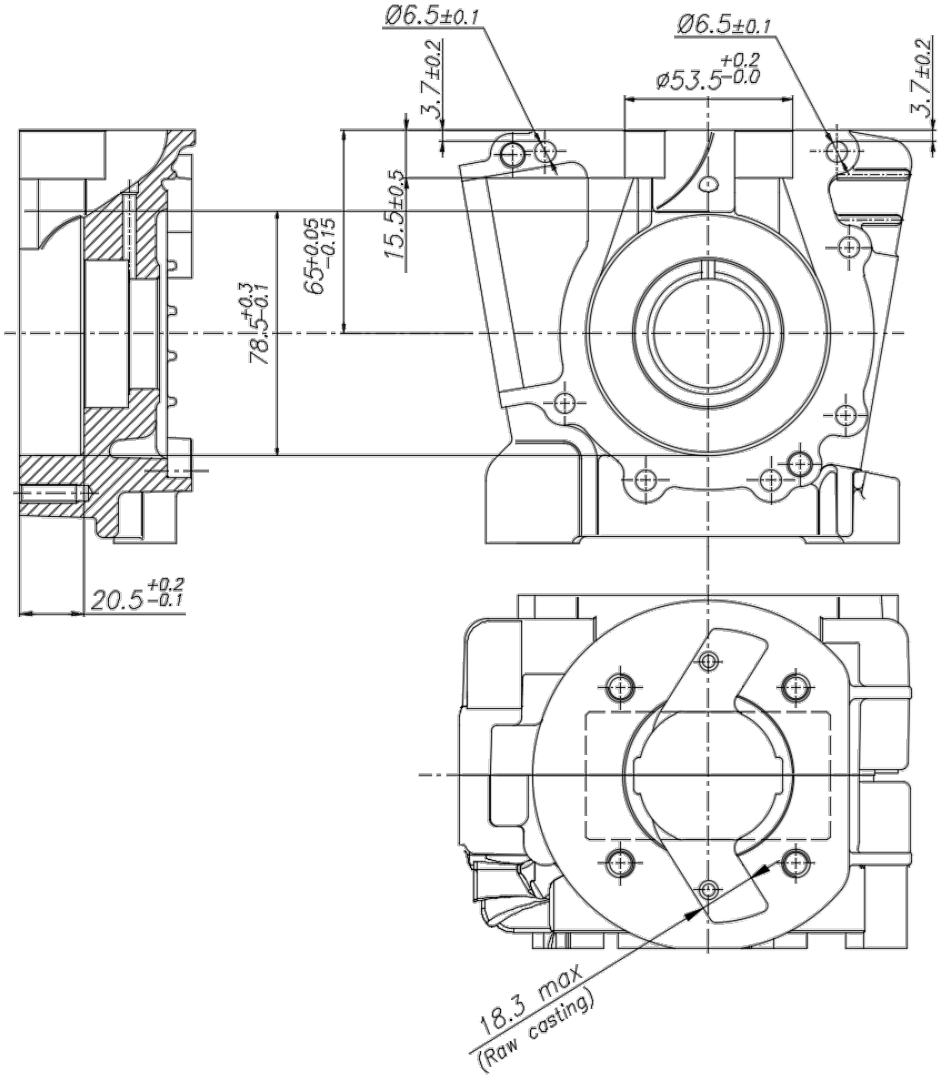
Combustion chamber volume in the cylinder head (with Volumeter and CIK insert):

7.4 cm³ min

REAR VIEW AND DIMENSIONS

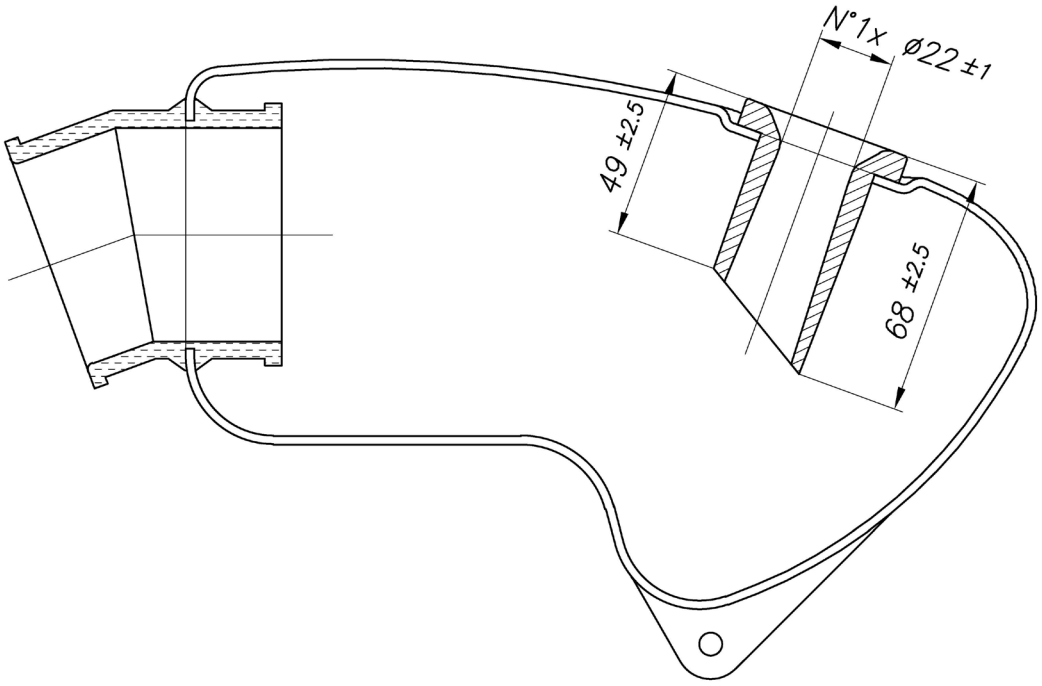


CRANKCASE INSIDE VIEW



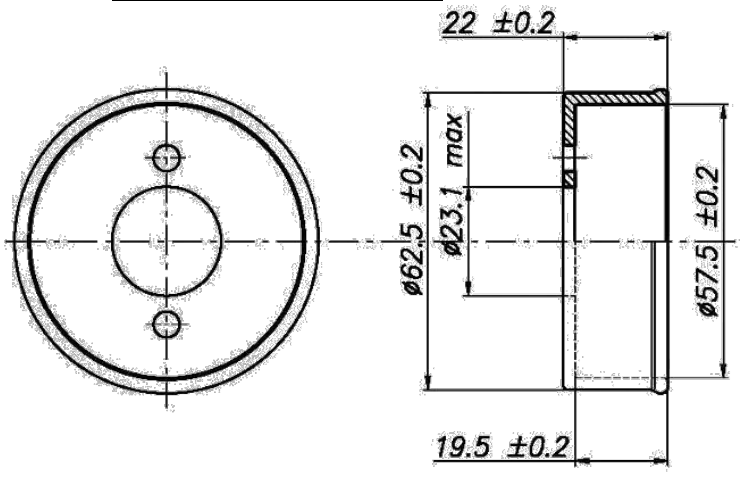
INLET SILENCER

CSAI HOMOLOGATION N° 01/SA/14

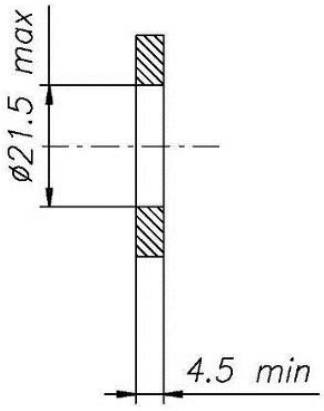


INLET SILENCER FLANGE AND THERMAL SPACER

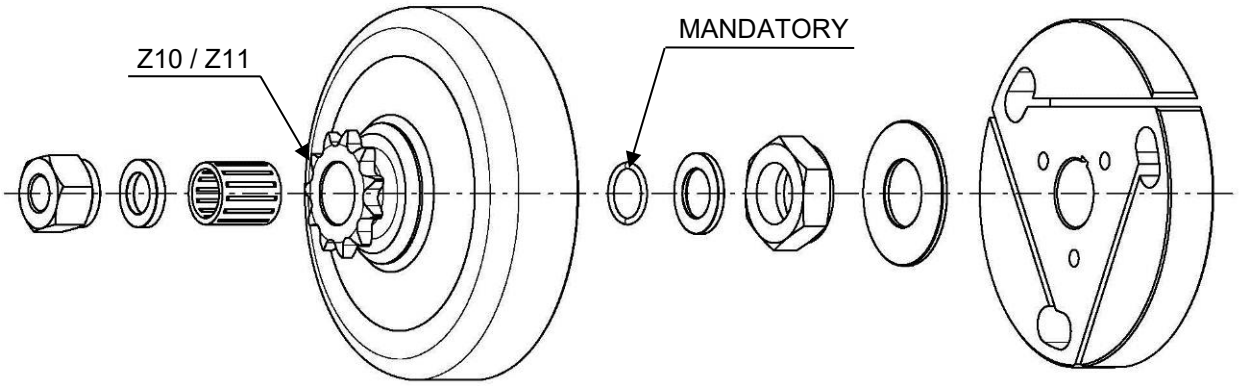
INLET SILENCER FLANGE



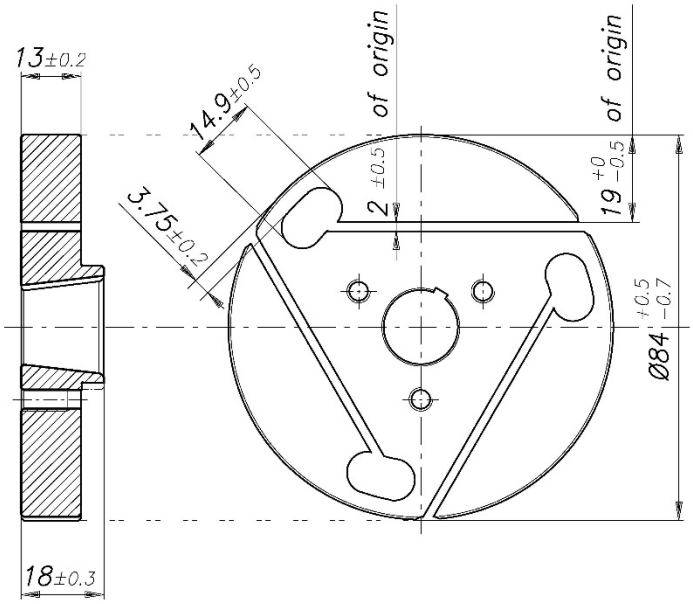
THERMAL SPACER



DESCRIPTION OF THE CLUTCH

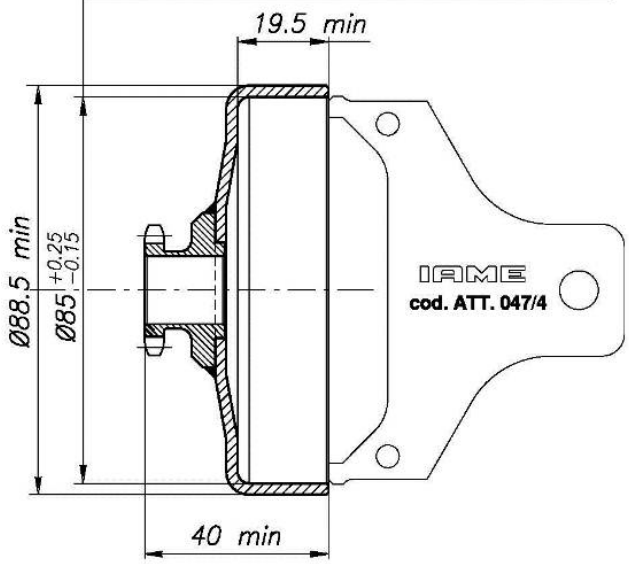


Min. weight = 445g



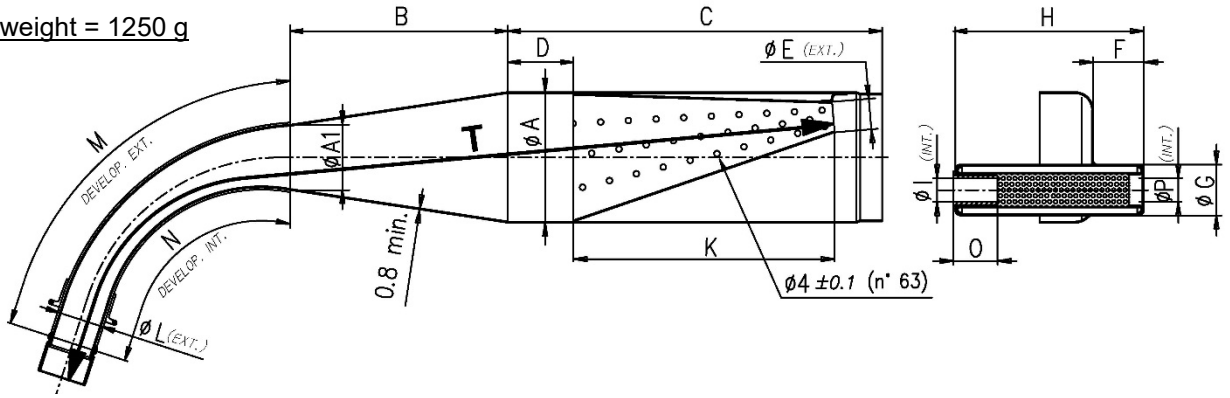
Min. weight = 210g

The template "N.P." must be used in multiple directions. In case it happen that in a direction "PASS" and another, "DO NOT PASS", the clutch drum is considered regular.



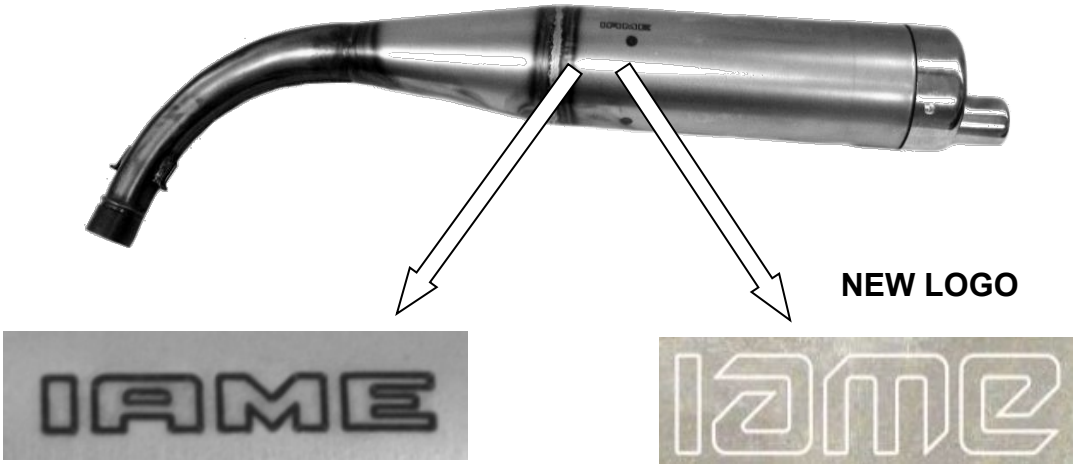
EXHAUST MUFFLER VIEW AND DIMENSIONS

Min. weight = 1250 g

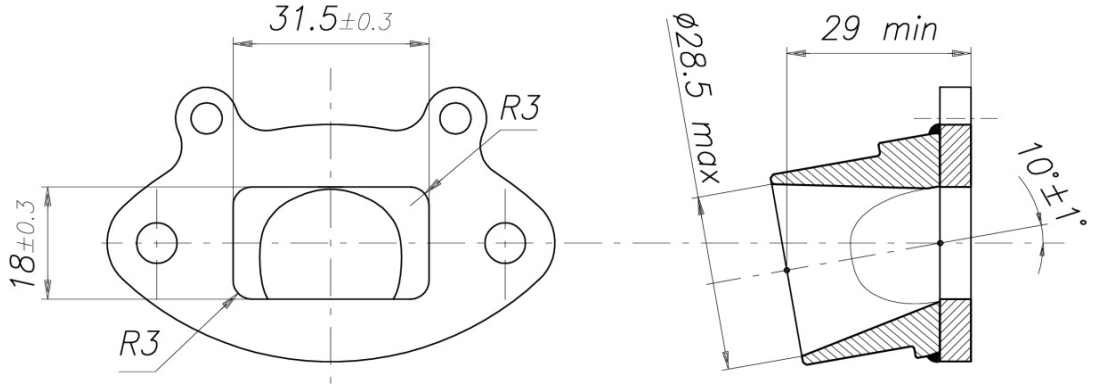


A: 90 ±1.5	**C:** 260 ±3	**F:** 35 ±3	**I:** 17 MAX	**M:** 240 ±3	**P:** 21 ±0.5
A1: 45 ±1	**D:** 47 ±5	**G:** 35 ±1	**K:** 181 ±3	**N:** 190 ±3	**T:** 600 ±5
B: 150 ±3	**E:** 20 ±1	**H:** 132 ±2	**L:** 31 ±1.5	**O:** 30 min.	

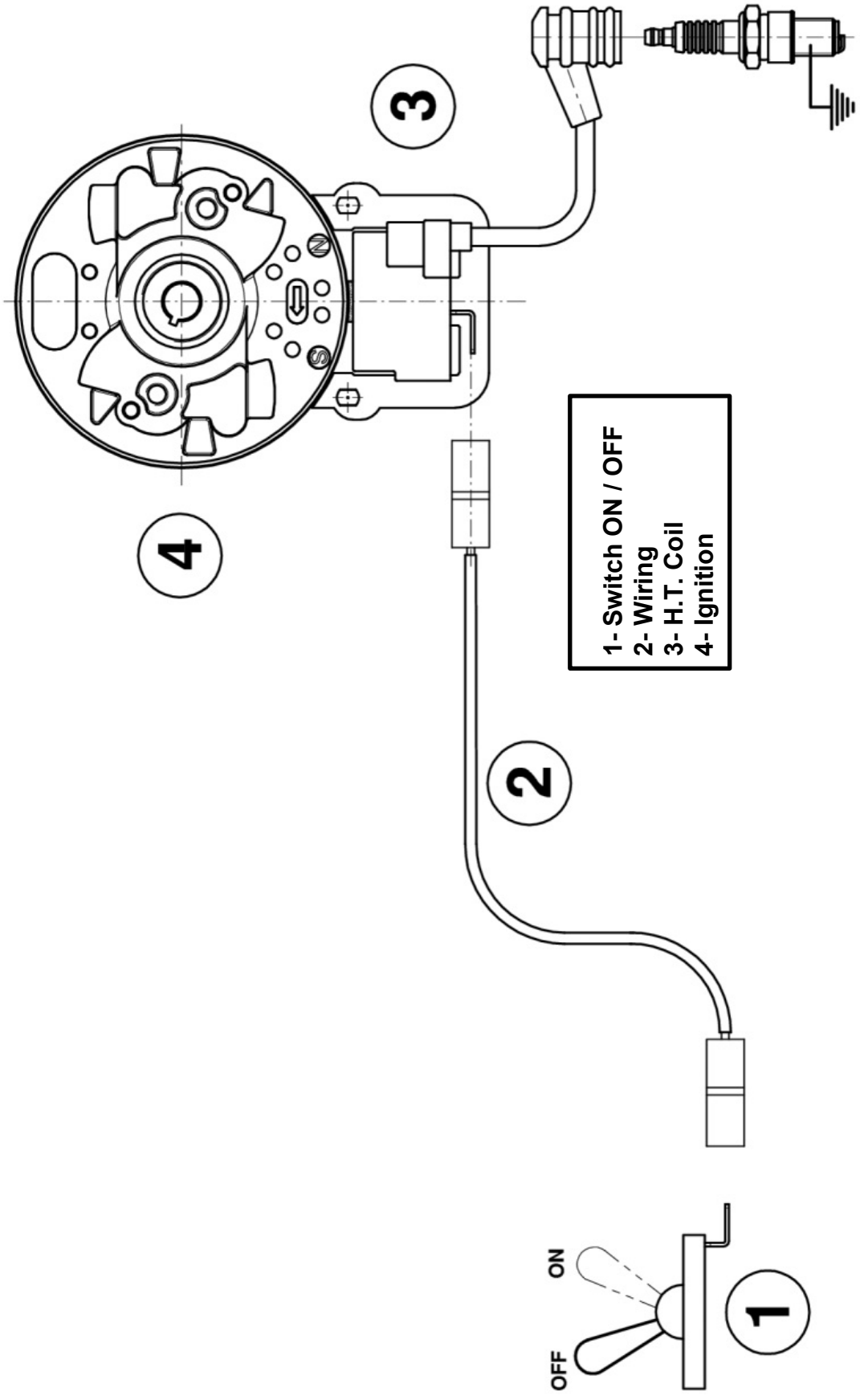
EXHAUST IDENTIFICATION MARKING



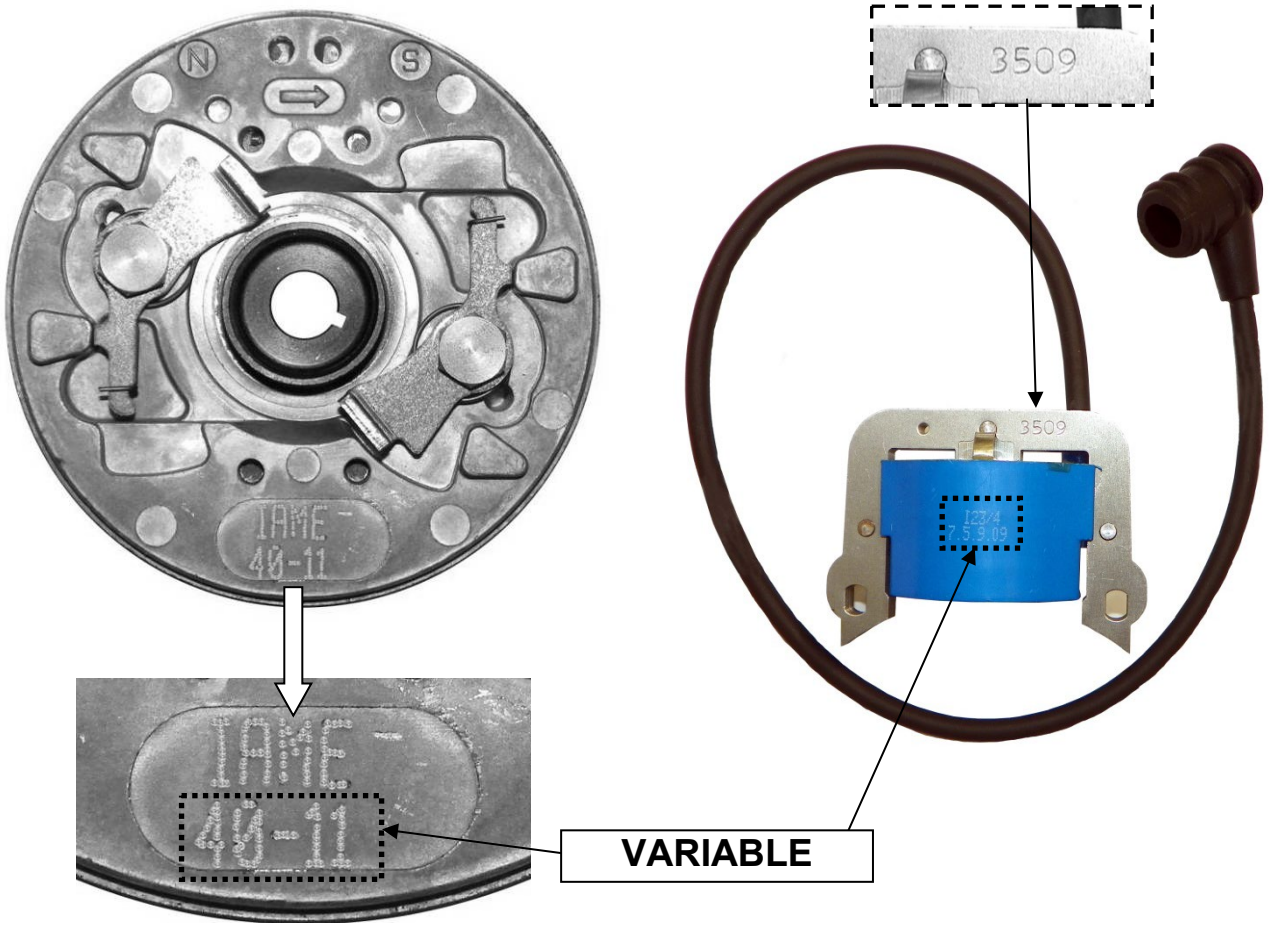
EXHAUST MANIFOLD



WIRING DIAGRAM

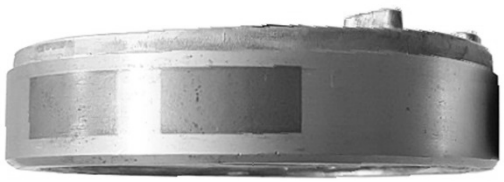
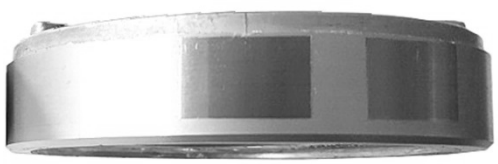


IGNITION PHOTO IDENTIFICATION MARKING

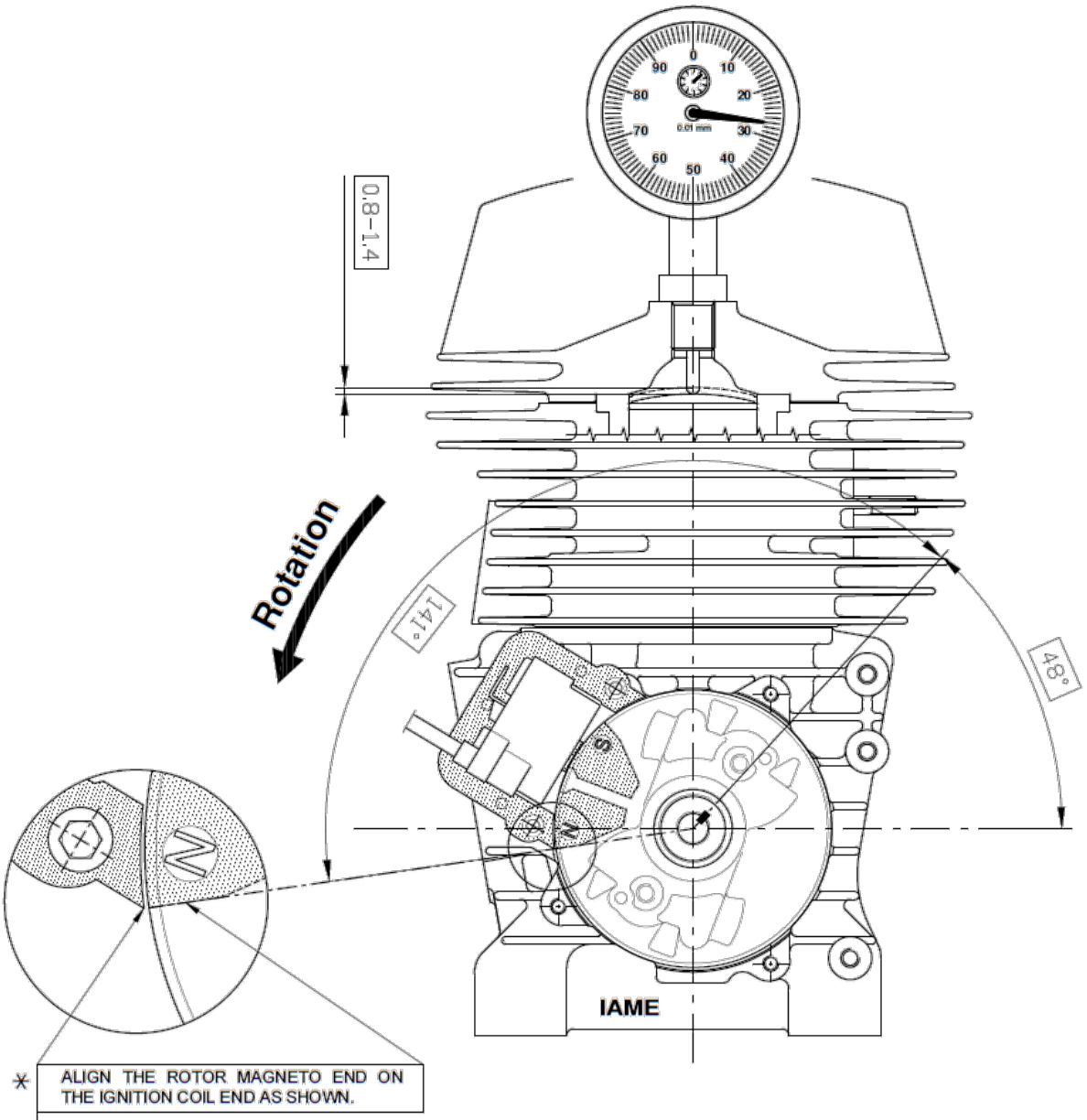


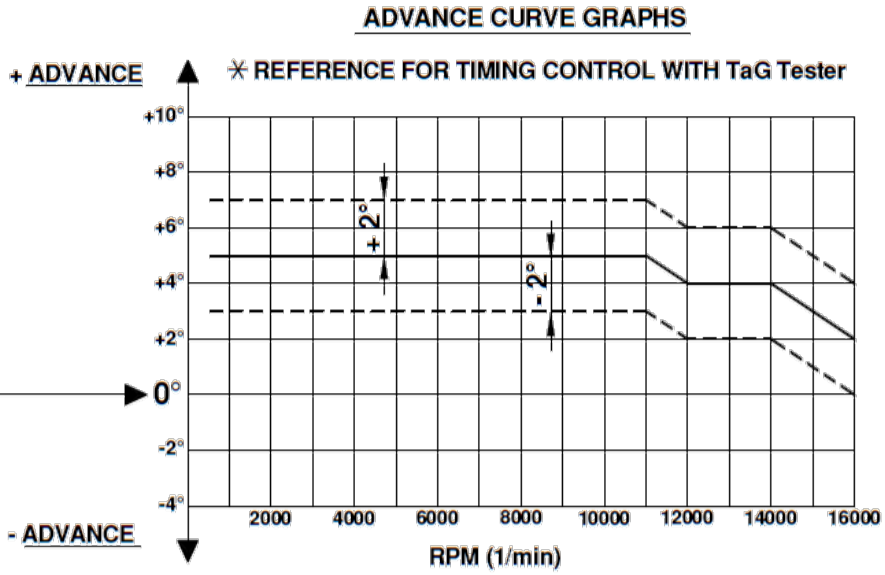
Min. weight = 362g

ALUMINIUM IGNITION PAWLS

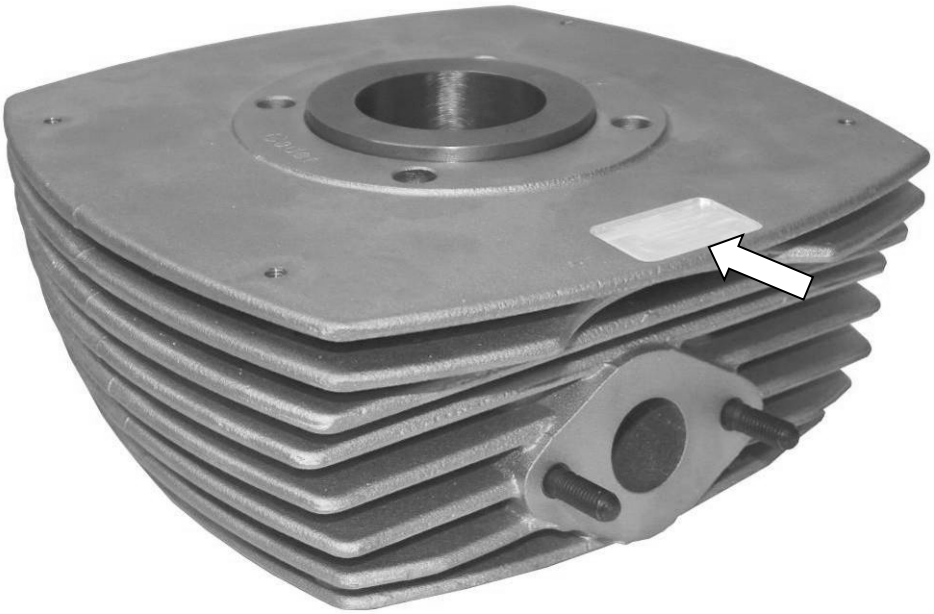
ALTERNATIVE IGNITION ROTOR	
TYPE 1	TYPE 2
	
	
	

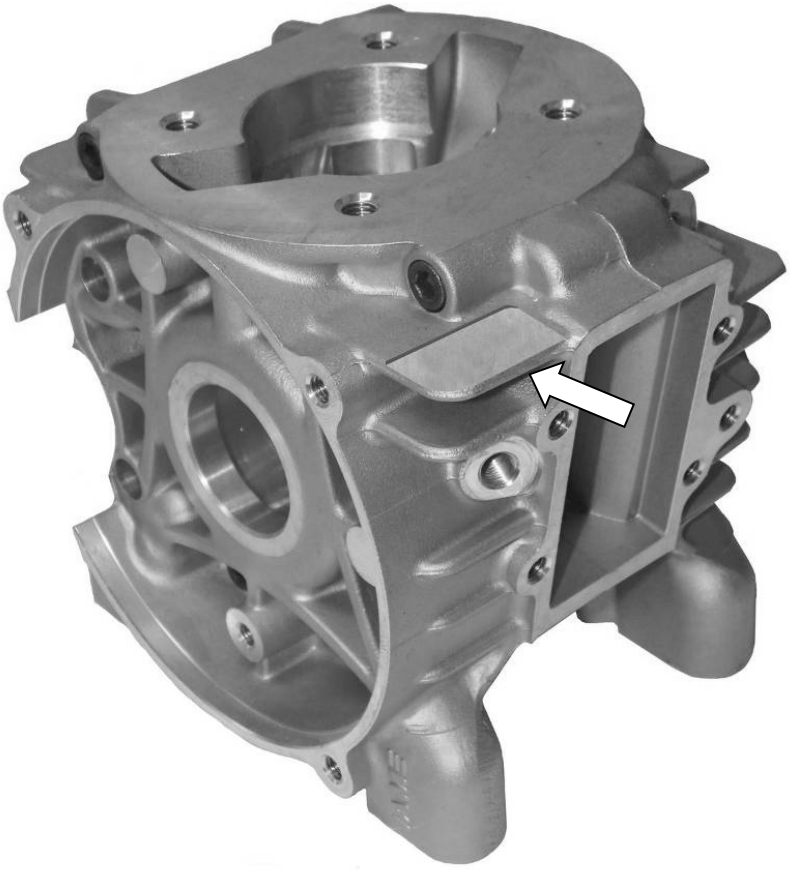
SCHEME FOR ADVANCE CONTROL



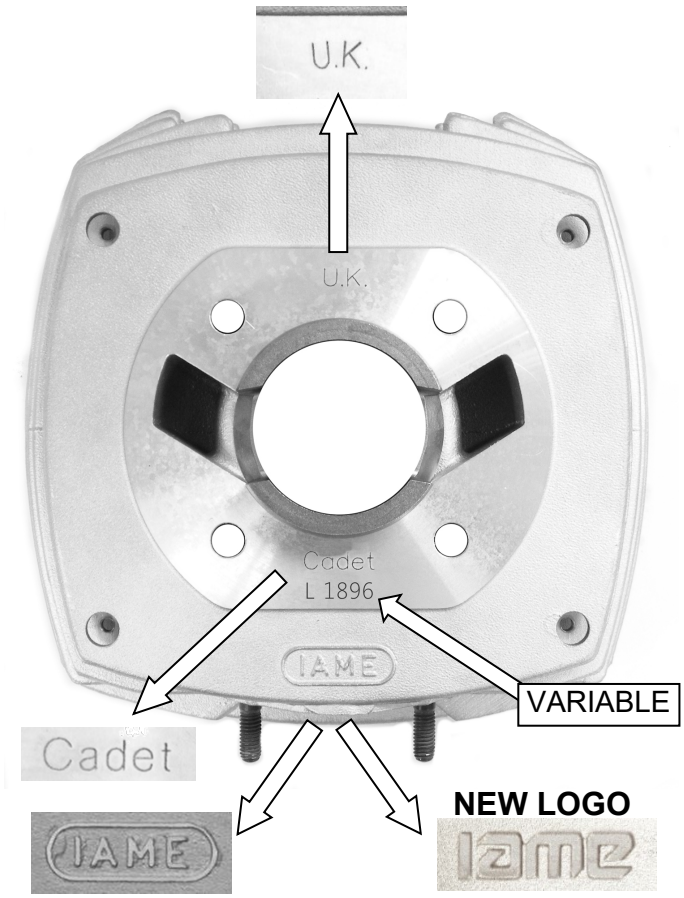


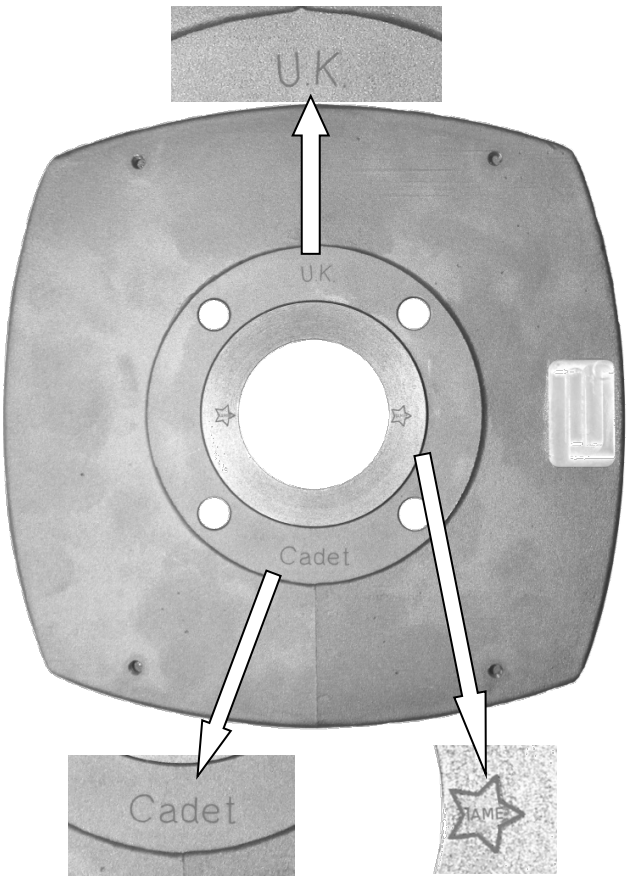
STICKER APPLICATION AREA



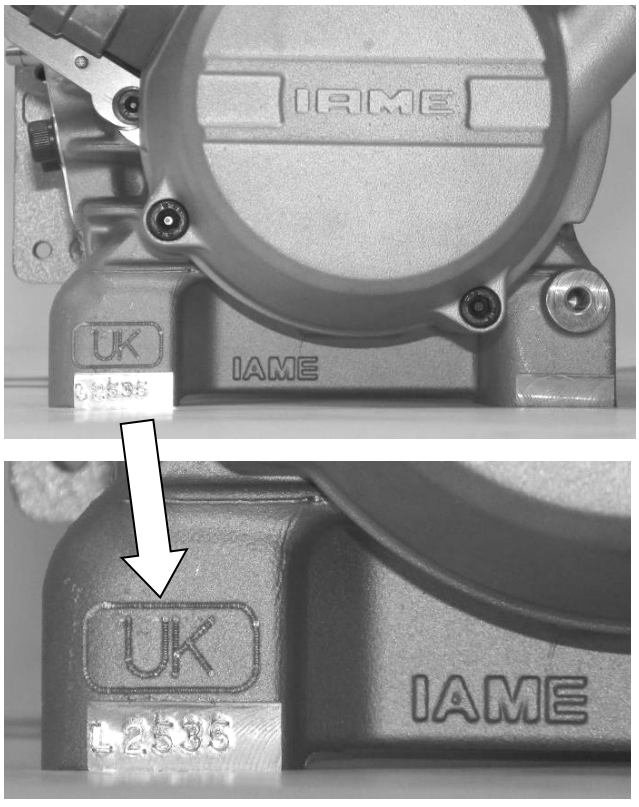


CYLINDER IDENTIFICATION MARKING

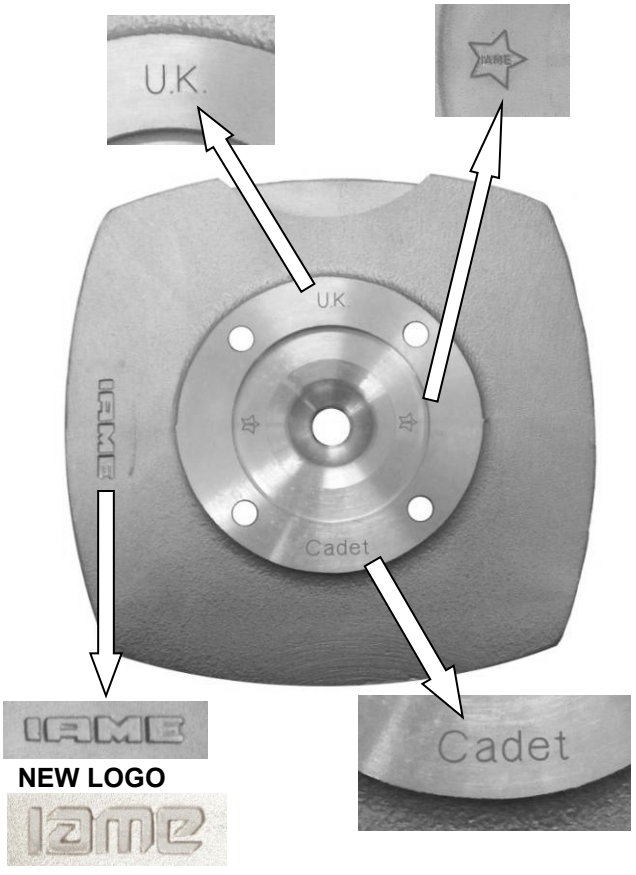




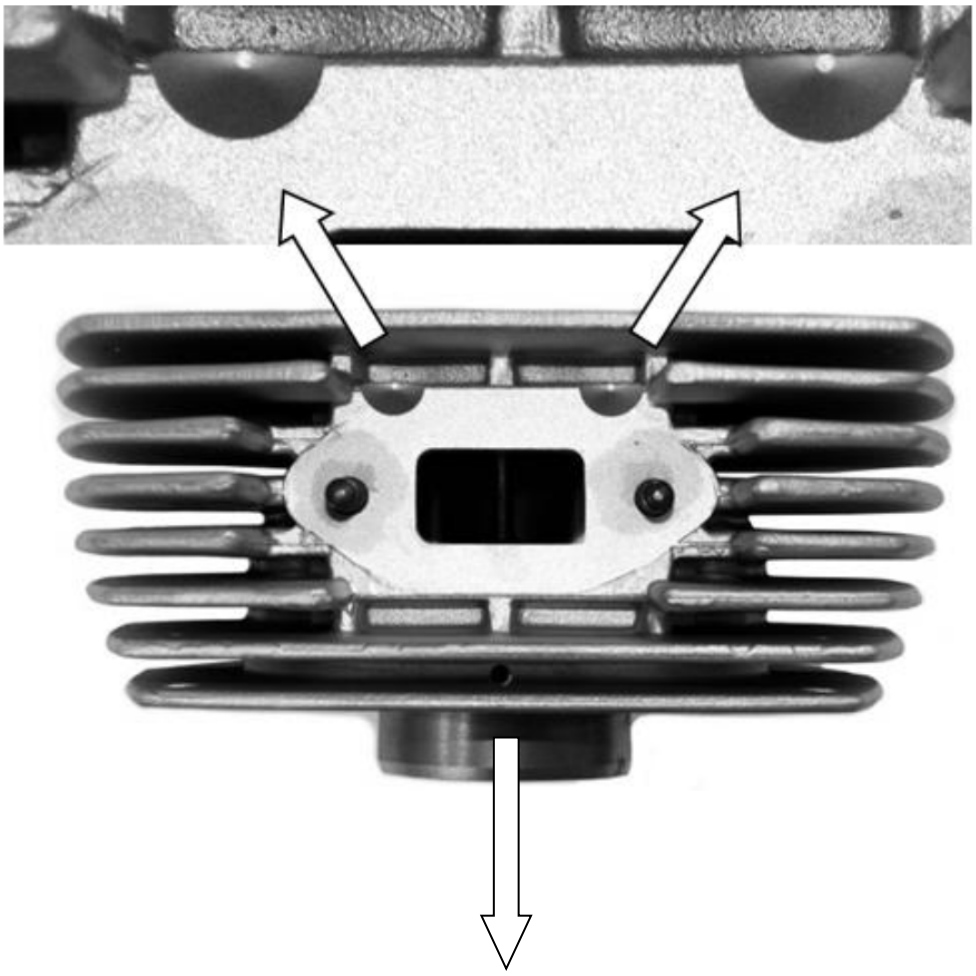
CRANKCASE IDENTIFICATION MARKING

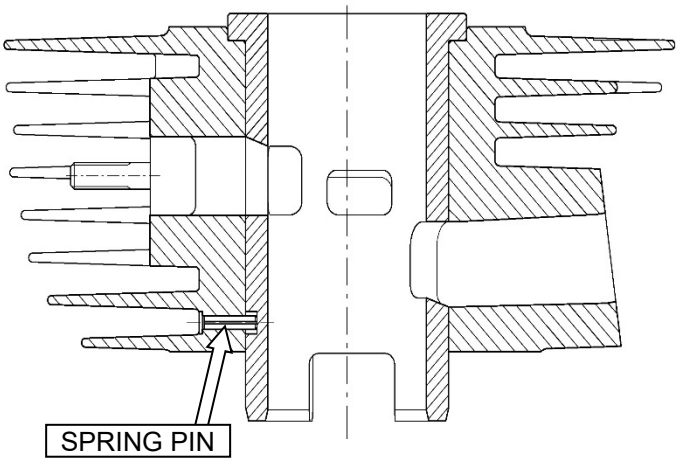


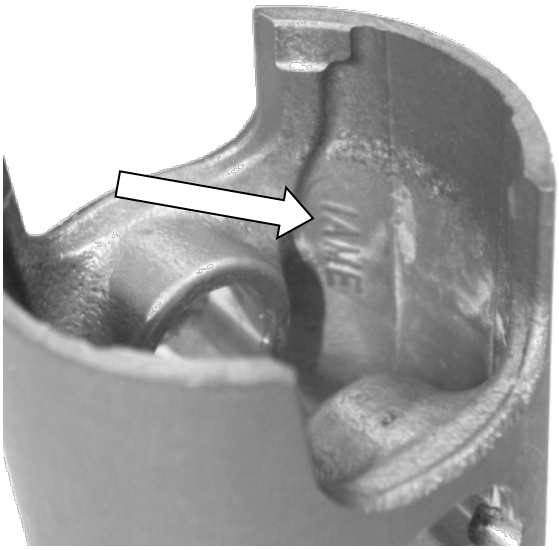
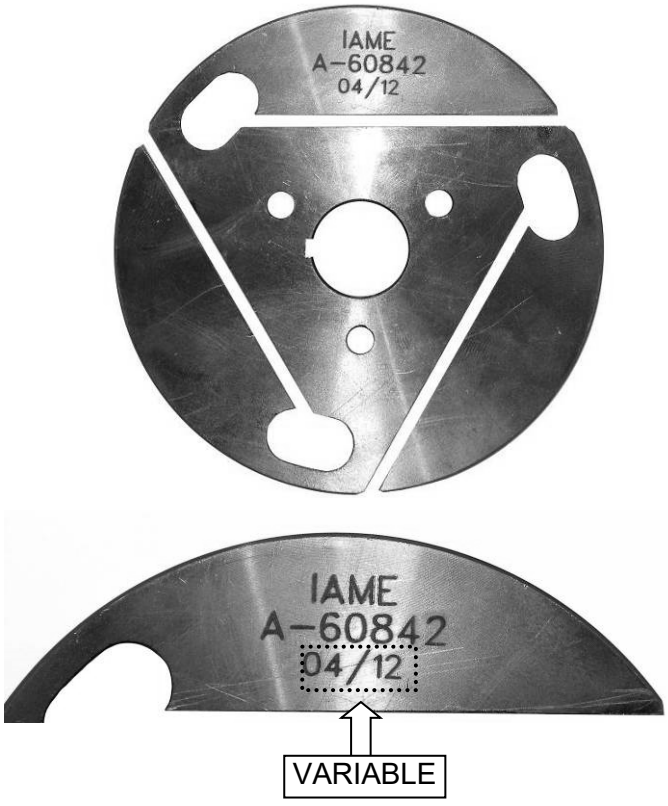
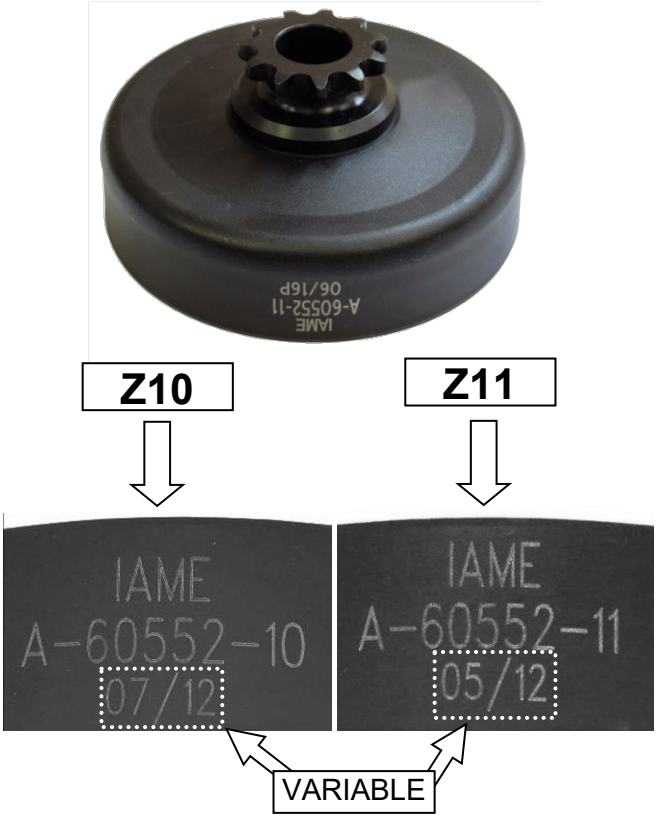
HEAD IDENTIFICATION MARKING



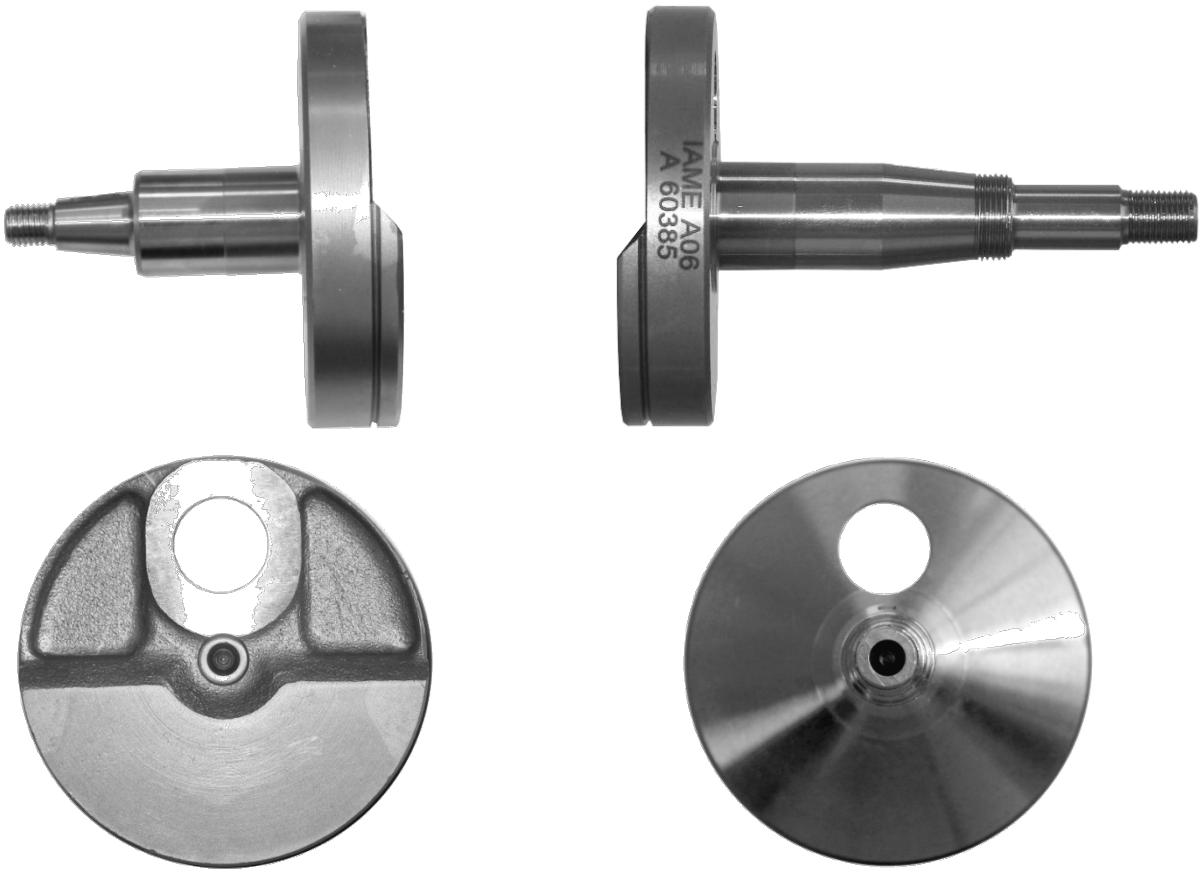
DETAIL OF MACHINING AND SPRING PIN ON CYLINDER





CONROD IDENTIFICATION MARKING	PISTON IDENTIFICATION MARKING
	
CLUTCH HUB IDENTIFICATION MARKING	CLUTCH DRUM IDENTIFICATION MARKING
	

CRANKSHAFT PHOTOS



CRANKSHAFT IDENTIFICATION MARKINGS

PARTICULAR OF COMPLETE

PHOTO IDENTIFICATION OF CLUTCH COVER – TYPES ALTERNATIVE

TYPE 1

ALTERNATIVE NEW LOGO

TYPE 2

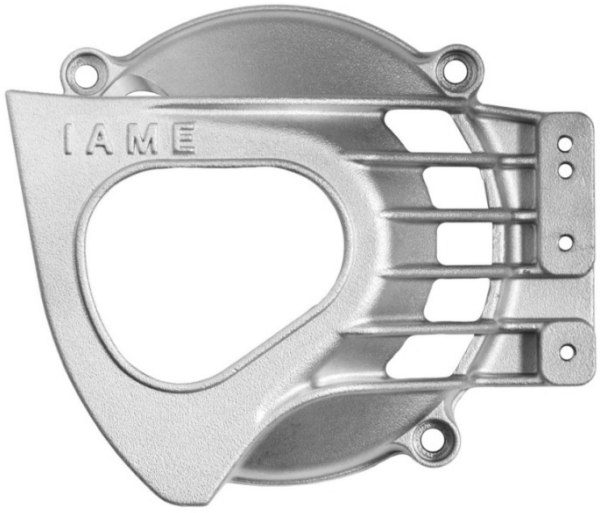
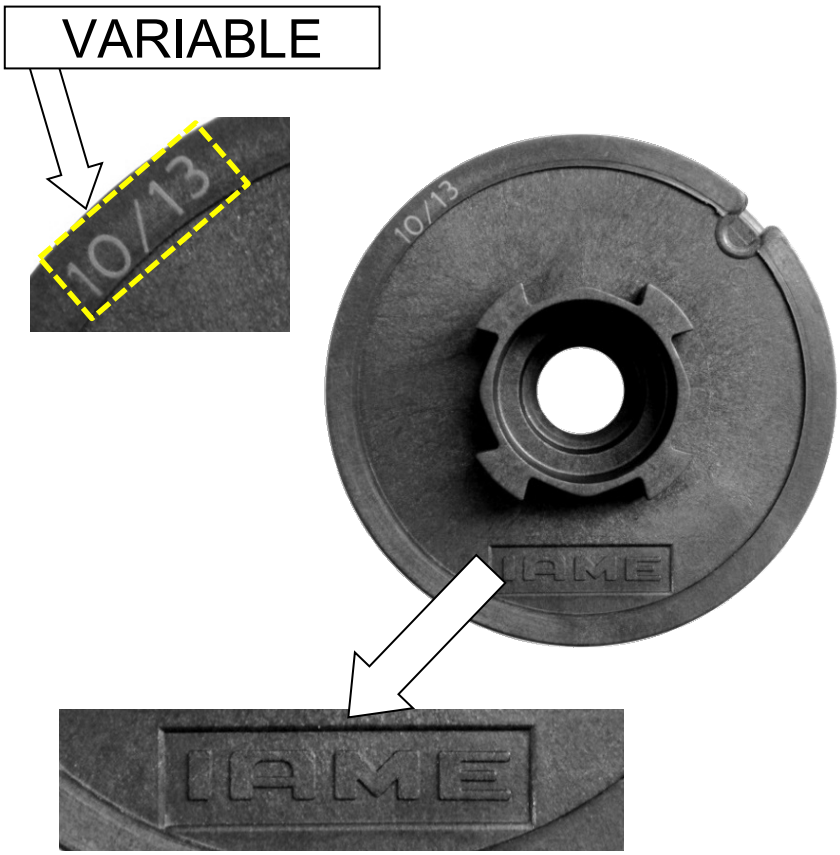


PHOTO IDENTIFICATION OF PULLEY

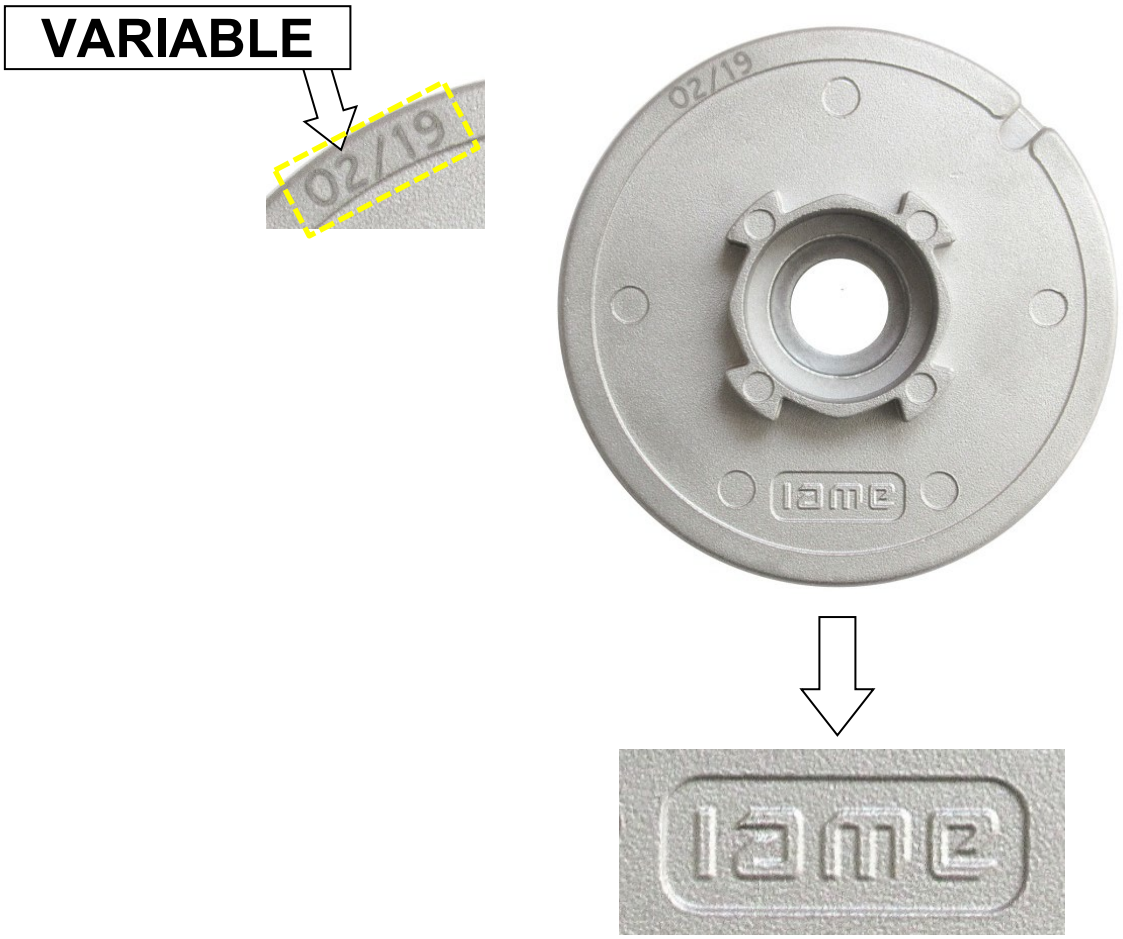
PLASTIC TYPE



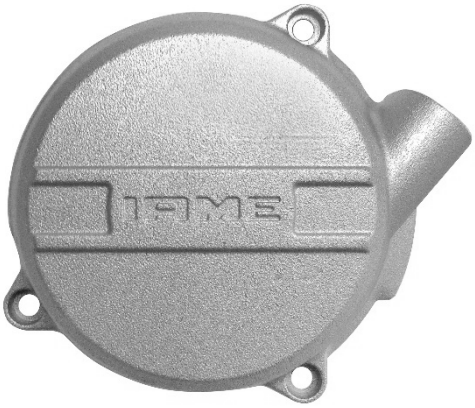
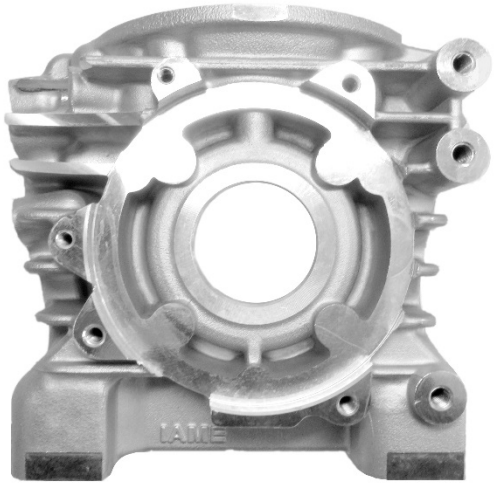
ALTERNATIVE AIRBOX MANIFOLD

ALTERNATIVE BLUE
ANODIZED MANIFOLD,
ALL OTHER DETAILS REMAIN
UNCHANGED

ALUMINUM TYPE



COMPONENTS WITH ALTERNATIVE NEW LOGO “IAME”

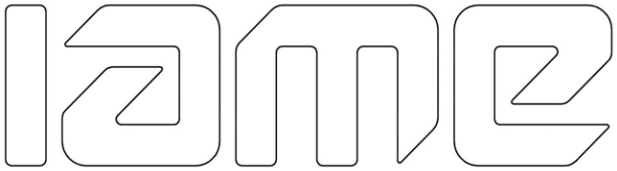
INLET FILTER	RECOIL COVER
 **NEW LOGO** 	 **NEW LOGO** 
SEMICARTER TRANSMISSION SIDE	**SEMICARTER IGNITION SIDE**
 **NEW LOGO** 	 **NEW LOGO** 

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

CARBURETTOR

Tillotson HL-394A

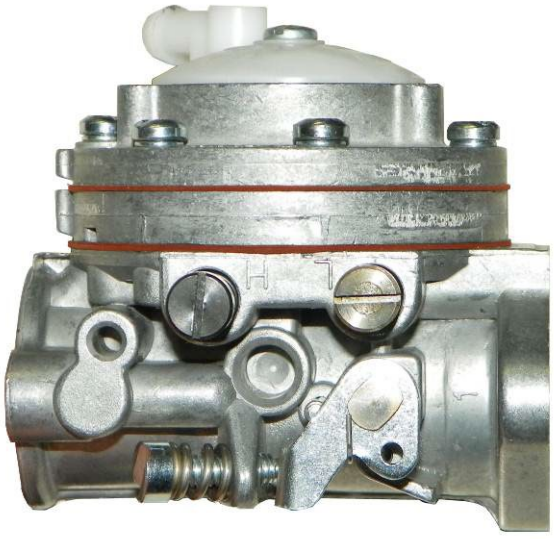


PHOTO OF ADJUSTING SIDE

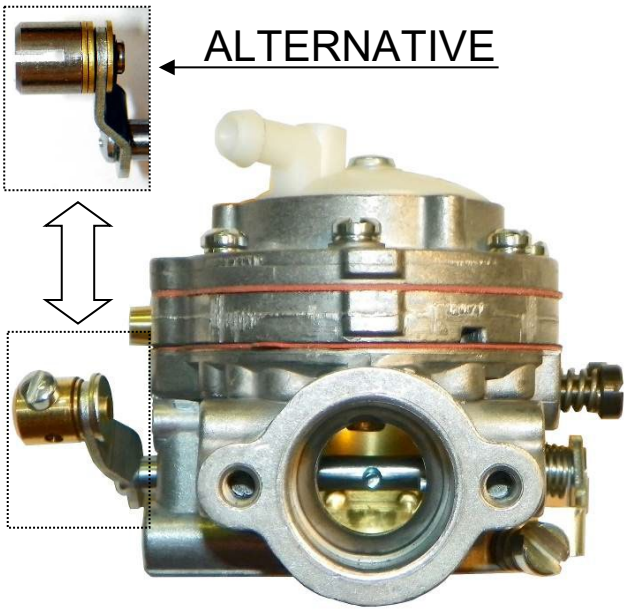
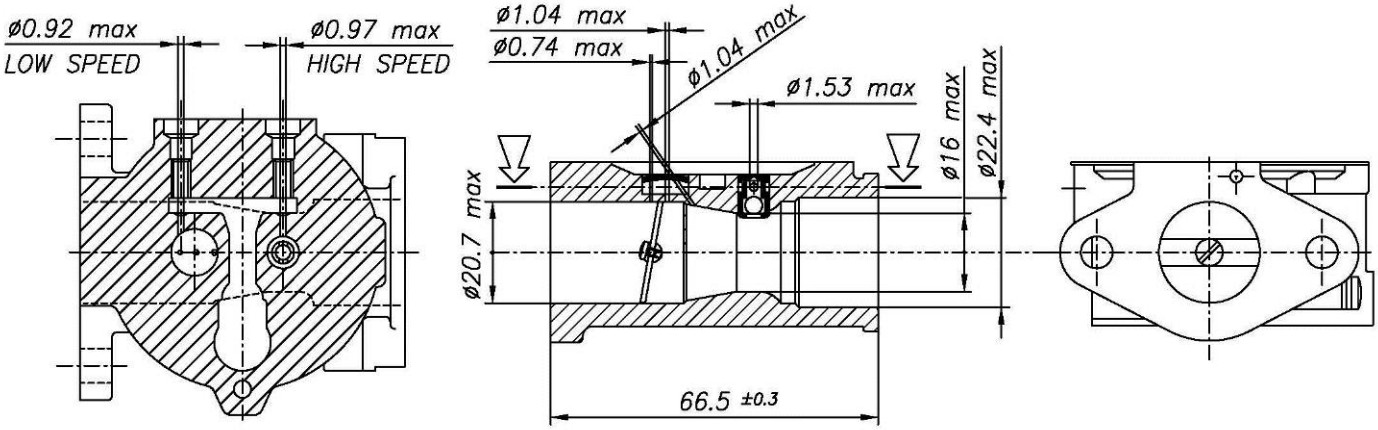


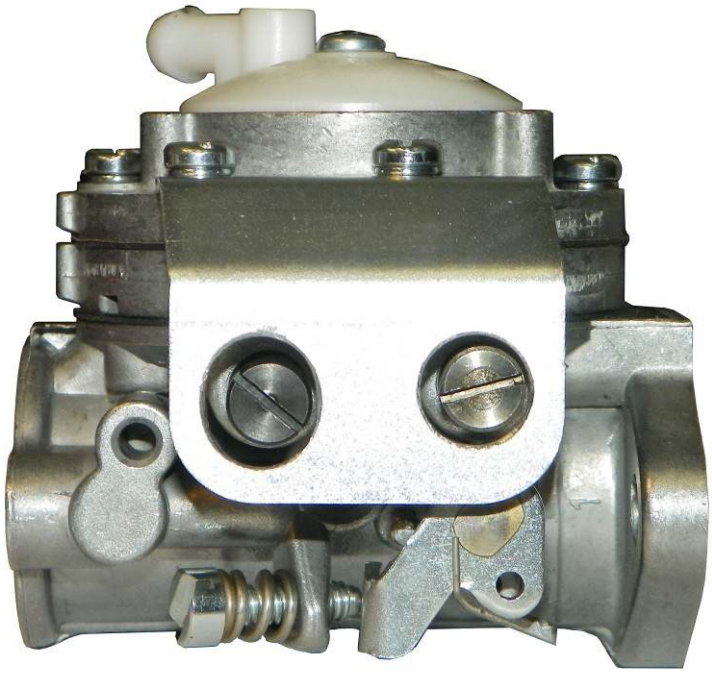
PHOTO OF INLET SIDE

Manufacturer	**TILLOTSON LTD.**
Make	**TILLOTSON**
Model	**HL-394A**

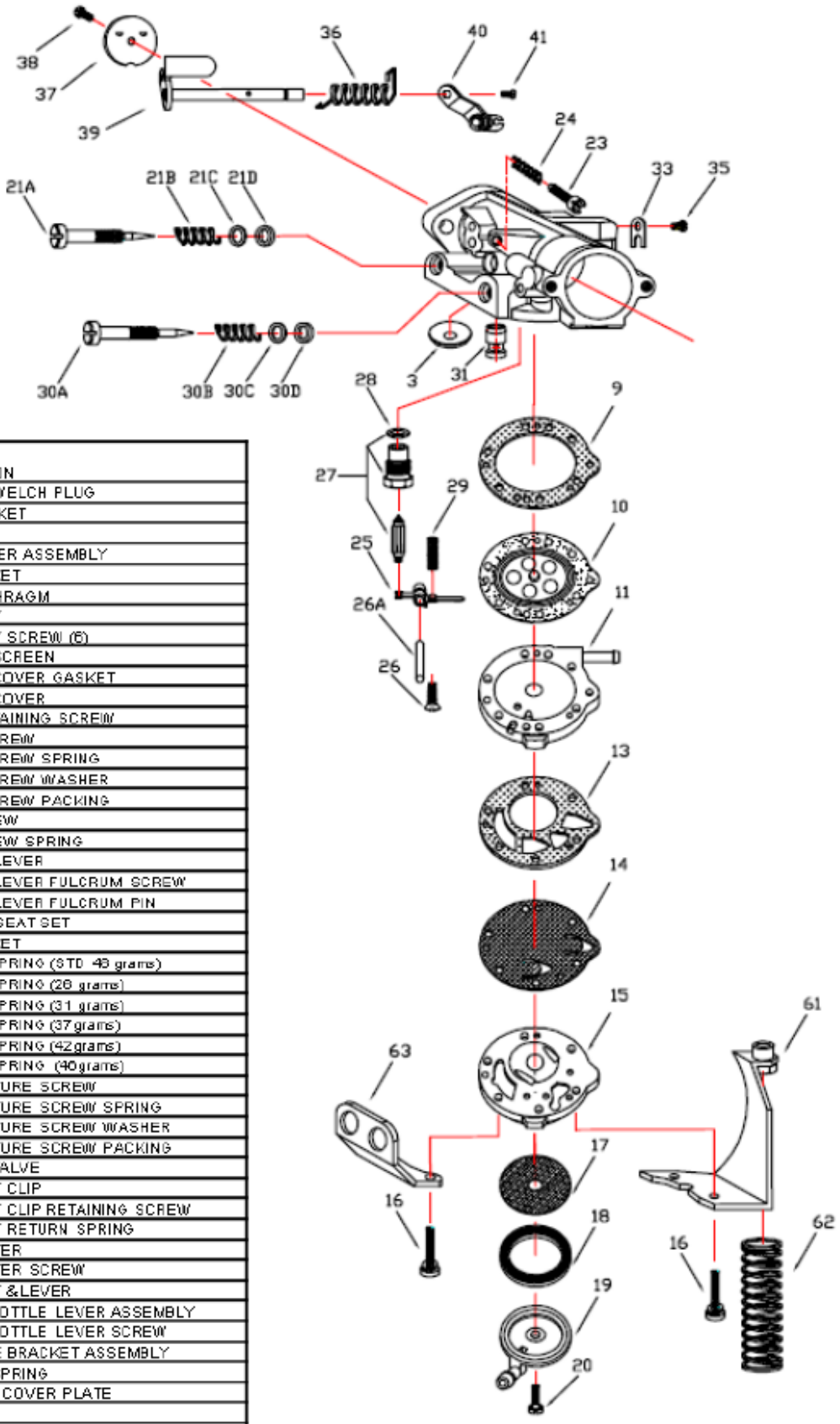
SECTION VIEW



GUARD SCREW PLATE



CARBURETTOR DESCRIPTION AND SKETCH OF PARTS



REF:	PART NO:	PART DESCRIPTION
3	179-55	BODY CHANNEL WELCH PLUG
9	16B-406	DIAPHRAGM GASKET
10	237-500	DIAPHRAGM
11	91-1018	DIAPHRAGM COVER ASSEMBLY
13	16B-407	FUEL PUMP GASKET
14	237-214	FUEL PUMP DIAPHRAGM
15	141-55	FUEL PUMP BODY
16	15C-51	FUEL PUMP BODY SCREW (6)
17	95-170	FUEL STRAINER SCREEN
18	16B-205	FUEL STRAINER COVER GASKET
19	91A-251	FUEL STRAINER COVER
20	15B-313	FUEL COVER RETAINING SCREW
21A	43-388	IDLE MIXTURE SCREW
21B	24B-449	IDLE MIXTURE SCREW SPRING
21C	78A-256	IDLE MIXTURE SCREW WASHER
21D	44-270	IDLE MIXTURE SCREW PACKING
23	15C-0	IDLE SPEED SCREW
24	24B-131	IDLE SPEED SCREW SPRING
25	165A-27	INLET CONTROL LEVER
26	15B-329	INLET CONTROL LEVER FULCRUM SCREW
26A	32-79	INLET CONTROL LEVER FULCRUM PIN
27	233-706 P	INLET NEEDLE & SEAT SET
28	16B-199	INLET SEAT GASKET
29	24B-345	INLET TENSION SPRING (STD 43 grams)
29A	24-B323	INLET TENSION SPRING (26 grams)
29B	24-C290	INLET TENSION SPRING (31 grams)
29C	24-B299	INLET TENSION SPRING (37 grams)
29D	24-C298	INLET TENSION SPRING (42 grams)
29E	24-C297	INLET TENSION SPRING (40 grams)
30A	43-401	HIGH SPEED MIXTURE SCREW
30B	24B-449	HIGH SPEED MIXTURE SCREW SPRING
30C	78A-256	HIGH SPEED MIXTURE SCREW WASHER
30D	44-270	HIGH SPEED MIXTURE SCREW PACKING
31	363-501	NOZZLE CHECK VALVE
33	29-218	THROTTLE SHAFT CLIP
35	15C-18	THROTTLE SHAFT CLIP RETAINING SCREW
36	24B-291	THROTTLE SHAFT RETURN SPRING
37	14A-34	THROTTLE SHUTTER
38	15C-29	THROTTLE SHUTTER SCREW
39	13-2136	THROTTLE SHAFT &LEVER
40	12-1219	SECONDARY THROTTLE LEVER ASSEMBLY
41	15-C-52	SECONDARY THROTTLE LEVER SCREW
61	136-561	THROTTLE CABLE BRACKET ASSEMBLY
62	24-C-334	CABLE RETURN SPRING
63	136-A-52	MIXTURE SCREW COVER PLATE
	RK-126HL	FULL REPAIR KIT
	DG-6HL	DIAPHRAGM & GASKET SET

PARTS OF CARBURETTOR

REF.9 - P. N°16B-406
DIAPHRAGM GASKET (ORANGE COLOR)

Thickness = 0.55 ±0.1 mm

REF.13 - P. N° 16B-407
FUEL PUMP GASKET (ORANGE COLOR)

Thickness = 0.8 ±0.1 mm

REF.10 - P. N°237-600
DIAPHRAGM

Thickness = 0.13 ±0.07 mm

REF.14 - P. N°237-214
FUEL PUMP DIAPHRAGM

Thickness = 0.08 ±0.063 mm

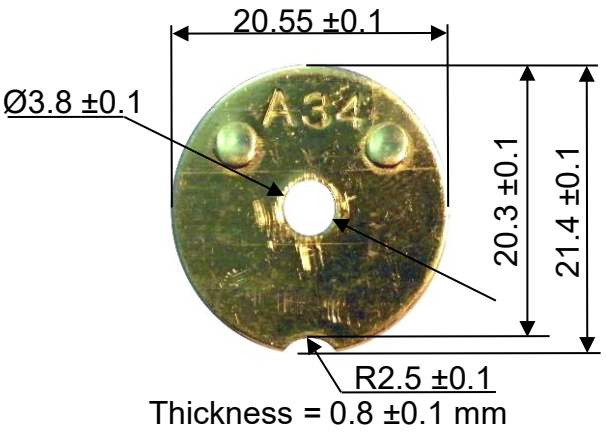
REF.11 - P. N° 91-1018
DIAPHRAGM COVER ASSEMBLY

Thickness = 6.75 ±0.15 mm

REF.15 - P. N° 141-55
FUEL PUMP BODY

Thickness = 12.5 ±0.15 mm

REF.37 - P. N° 14A-34
THROTTLE SHUTTER



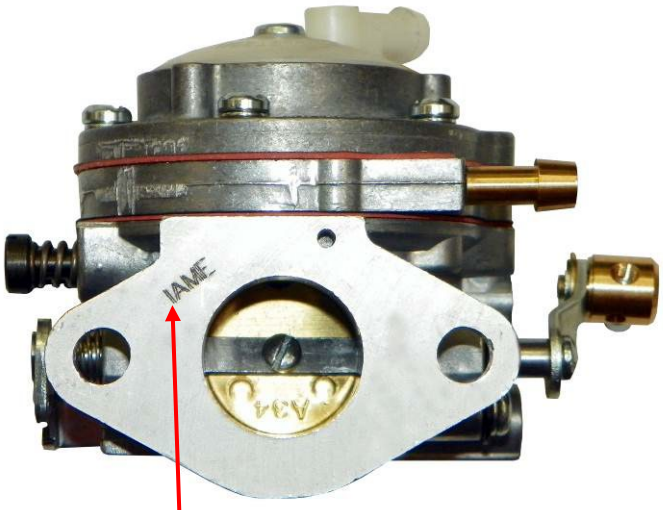
Thickness = 0.8 ±0.1 mm

REF.27 - P. N° 233-706P
INLET NEEDLE + SEAT SET

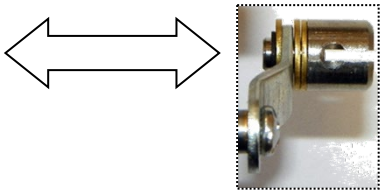
REF.30A - P. N° 43-401
HIGH MIXTURE SCREW

REF.21A - P. N° 43-388
IDLE MIXTURE SCREW

MARKING



ALTERNATIVE



LASER MARKING "IAME"