



## IAME BAMBINO CLASS RULES

v7 1/5/2025

### IAME Bambino M1 Kid Kart:

Age: 5 – 8 years old

**\* Driver will not be able to compete until they reach 5 years old; ie. if the driver turns 5 June 10th they can race on or after June 10th.**

**Engine:** IAME Bambino

**Fuel:** VP MS98 & Elf HTX909 @ 7 oz/gallon

**Tires:** Slicks MG "SH2" Red 4.60 Fronts & Rears

Rains MG "WT, SW, SW2" 4.20 Fronts & Rears

**Weight:** 150 lbs.

**\* SFI 20.1 Chest Protectors are MANDATORY for all Kid Kart Drivers.**

**Frame** – Kid Kart or Cadet chassis permitted. Seat and pedals should be located where the driver can reach and control the kart.

Kid Kart Chassis:

Seat and Steering Height – Minimum seat height is 12", maximum steering wheel height is 20".

Wheelbase – 29" minimum 35.5" maximum.

Width – Front 40" maximum outside of tire/rim, no minimum. Rear 39" minimum, 42" maximum outside of tire/rim.

Cadet Chassis: per 2024 USPKS rulebook, 950mm maximum wheelbase.

**Bodywork** – CIK Side pods and nose cones are mandatory.

**Rear Bumper** – CIK plastic bumper required

**Chain Guard** – Chain must be completely covered when looking from above or behind kart. A full chain guard is recommended but not mandatory.

**Chain and Gearing** - #219 chain, 10 tooth driver with 89 tooth gear.

**Tire Circumference** – Maximum rear tire circumference is 33 3/8".

**Tire Pressure** – Maximum tire pressure is 30 psi after race.

**Series Engine Claim Rule** - AMR Motorplex, at its discretion, may claim any competitor's engine if deemed necessary to maintain competitive balance. A new IAME Bambino engine package will be provided to replace any claimed engine. Competitors refusing engine claim will lose any accumulated championship points and will be barred from further competition in the class.





## IAME M1 Bambino Supplementary Class Tech Rules

v7 01/05/2025

The intent of this class is that the engine be run as factory supplied unless otherwise noted. **Components may be compared to known stock parts to ensure compliance.** The official IAME fiche dated **01/03/2019 n'363** is considered part of the technical specs. No modification or tuning is permitted. Only engines imported (serial number registered) thru the official IAME importer may be used. Only genuine IAME replacement parts may be used.

**Gear Ratio:** 10-89

**Max Rear Tire Diameter:** 33 3/8" – Maximum pressure 30psi after race session.

**Spark Plug:** The following plugs are approved for competition: Autolite AR50 or AR51. Stock gasket to be used as supplied. No CHT sensor and/or other washers permitted.

**Main Bearings:** Must be 6204 C4, unmodified with 8 steel balls and plastic cage.

**Fuel & Oil:** VP MS98 & Elf HTX909 @ 7oz/gallon

**Air Intake Silencer:** Dellorto DGM14498S – 2 Inlet holes @ 12mm NO-GO

**Muffler:** To be run as manufactured, gasket must be in place, no leakage allowed. Outlet 10.3mm max.

**Exhaust Restrictor:** 13.5mm NO-GO - no leakage allowed.

**Repairs:** Damaged threads may be repaired with Helicoils or other inserts. Original location must be maintained.

**Base Gaskets:** Maximum of 2 (EBP-85045, EBP-85046, EBP-85046-A, or EBP85046-B allowed).

**Head Gaskets:** Maximum of 4 allowed (A-61047 or A-61048). Any combination allowed.

**Clutch:** As factory supplied without modifications. Excessive oil/grease is grounds for disqualification. Clutch test 5000 rpm maximum.

**Squish Minimum:** 2mm (.078") checked along the centerline of the piston pin.

**Carburetor:** HS-325A only.

- **To be run as delivered**
- Venturi 10.3mm max.
- Inlet spring and pop off value is non-tech.
- **Choke assembly to remain in place.**
- Low speed welch plug must not show signs of tampering or removal / replacement.
- \*Bypassing fuel or air to the motor in any way other than as manufactured is illegal.

**Timing:**

- Per advance control on page 10 of the Factory Fiche Document.
- Insert dial indicator in spark plug hole, zero at top dead center.
- Align marks per photo.
- Reading must be between 0.035" - 0.045".
- All ignition components must be OEM and unaltered.

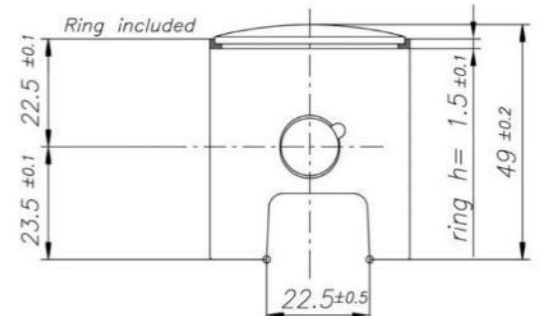
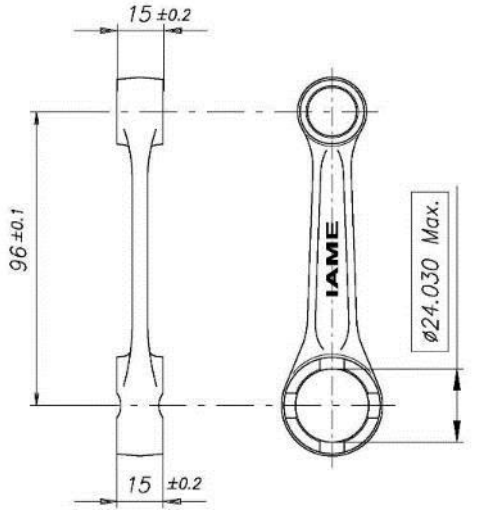


# M1 60cc - PULL START

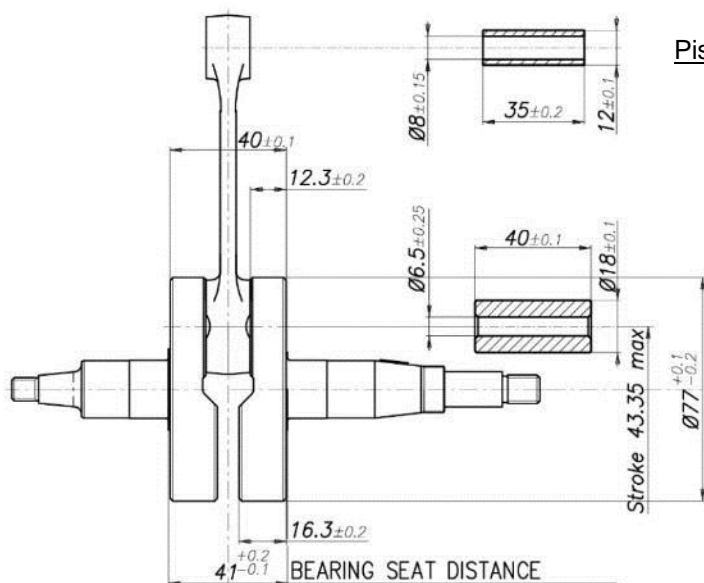


## FEATURES

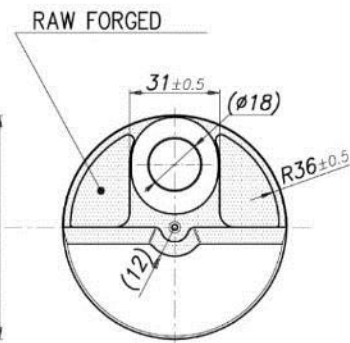
		FEATURES	
		Cylinder volume	60.00 cm <sup>3</sup> max
		Bore	41.80 mm
		Max. theoretical bore	41.97 mm
		Stroke	43.35 mm max
		Cooling system	Air
		Inlet system	Piston Valve
		Number of carbs	1
Carburettor Tillotson	HS-325A (Ø10.3 Venturi)	Cylinder/crankcase transfers n°	2 / 2
Number of piston rings	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
Pull Start	Yes	Combustion chamber Volume	8 cm <sup>3</sup> min.

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

### CRANKSHAFT

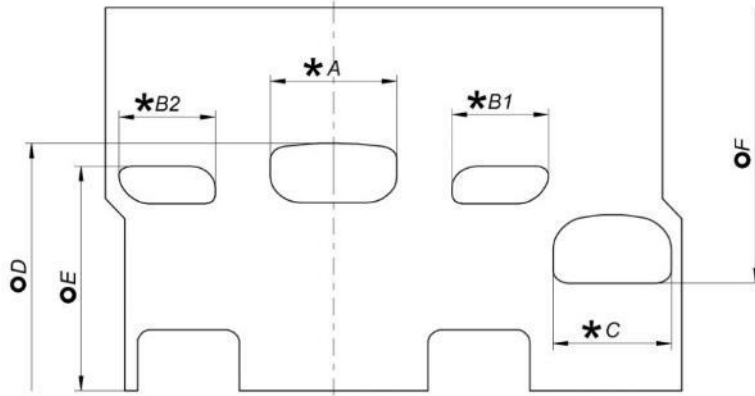


Piston pin min. weight 15.5g



Complete Crankshaft min. weight 1190 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.

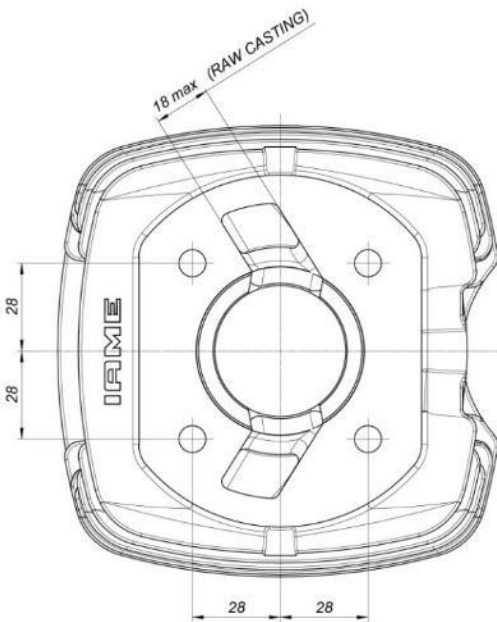
TOOL IAME Cod. 10194



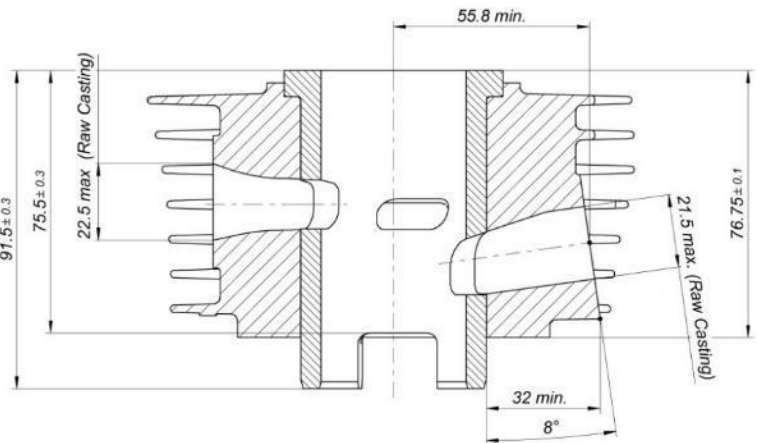
\* **CHORDAL READING**

○ **ANGULAR READING BY INSERT A 0.2x5 mm GAUGE**  
USING IAME TOOL - Cod. 10194

### CYLINDER BASE VIEW



### CYLINDER CROSS SECTION VIEW

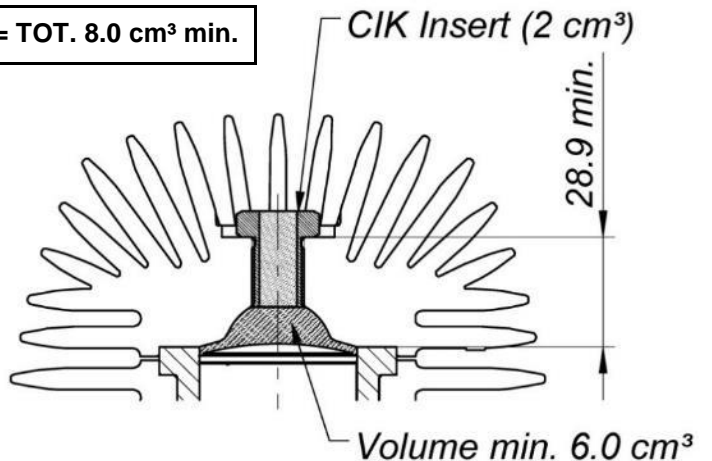


### COMBUSTION CHAMBER VIEW

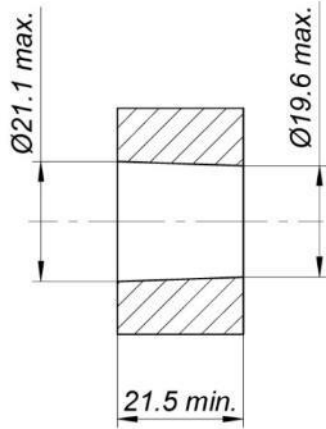
**COMBUSTION CHAMBER VOLUME = 6.0 + 2 = TOT. 8.0 cm<sup>3</sup> min.**

**SQUISH MIN.= 0.078" (2.0 mm)**

Combustion chamber volume in the cylinder head  
(with Volumeter and CIK insert):  
**7.0 cm<sup>3</sup> min**

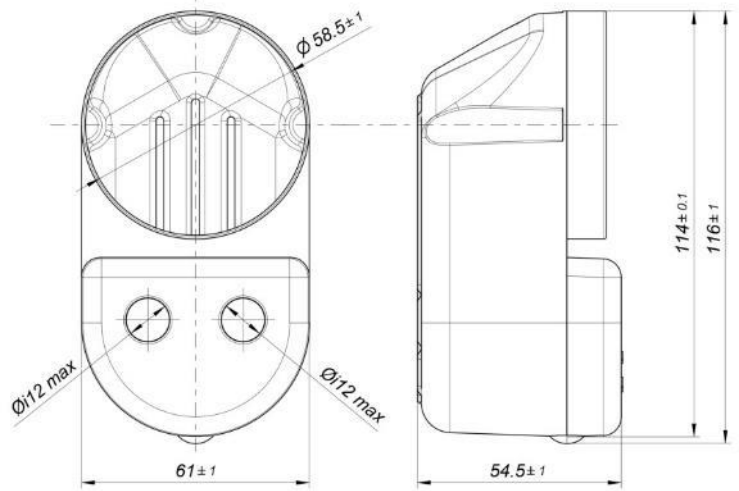


THERMAL SPACER

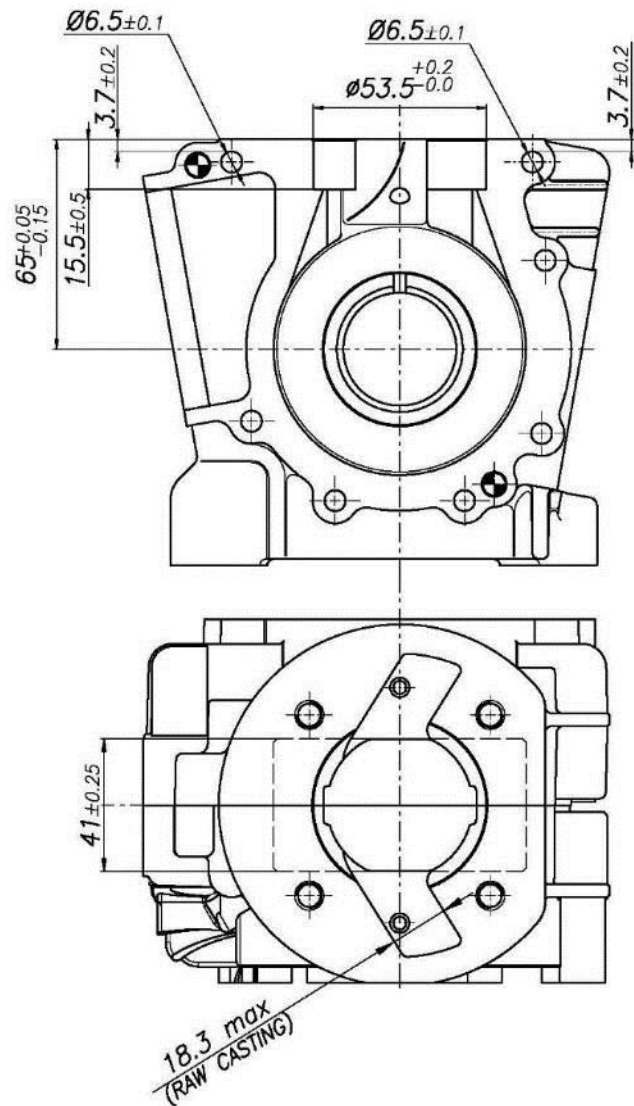


Q.ty: 1

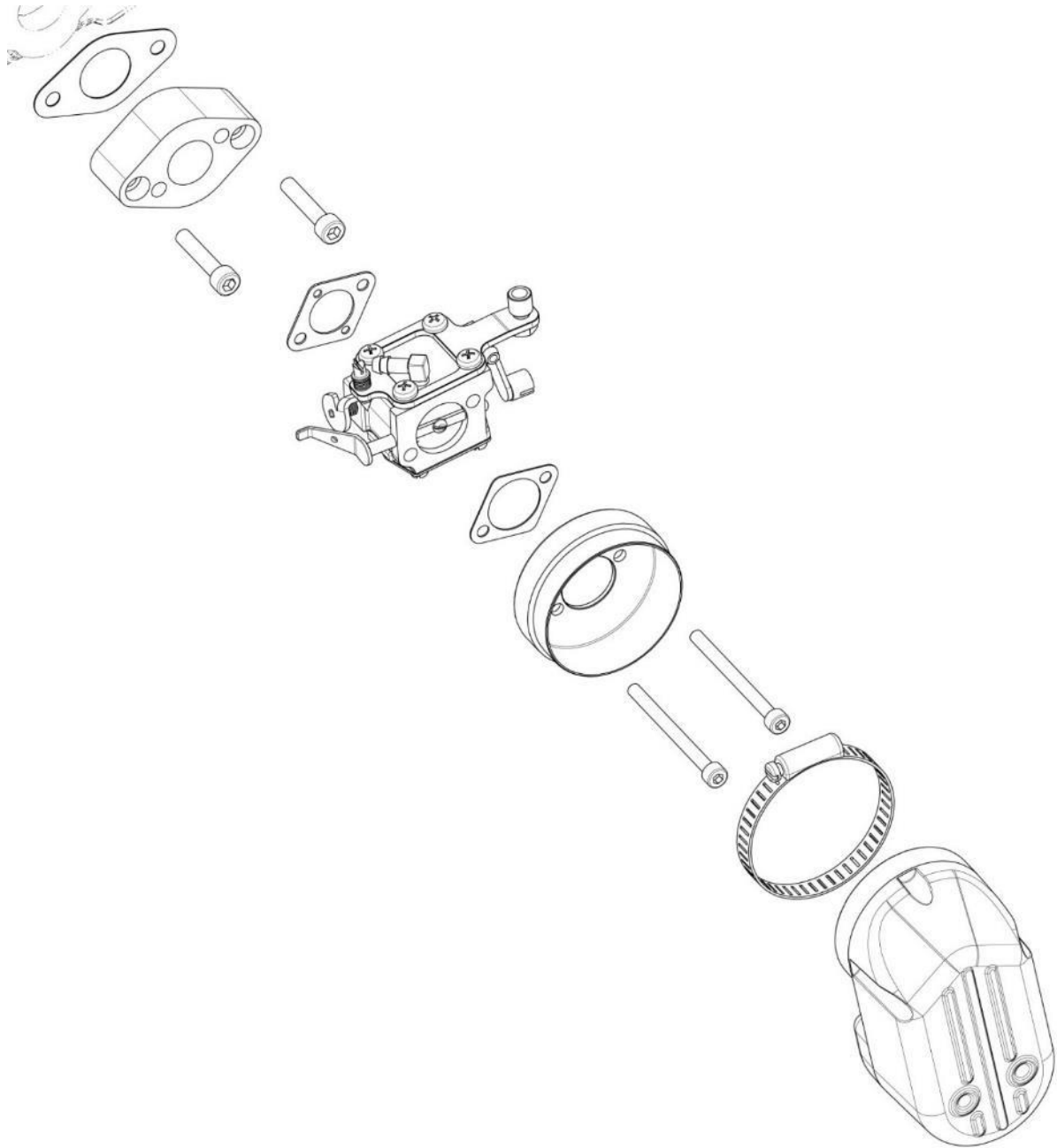
INLET SILENCER



CRANKCASE INSIDE VIEW

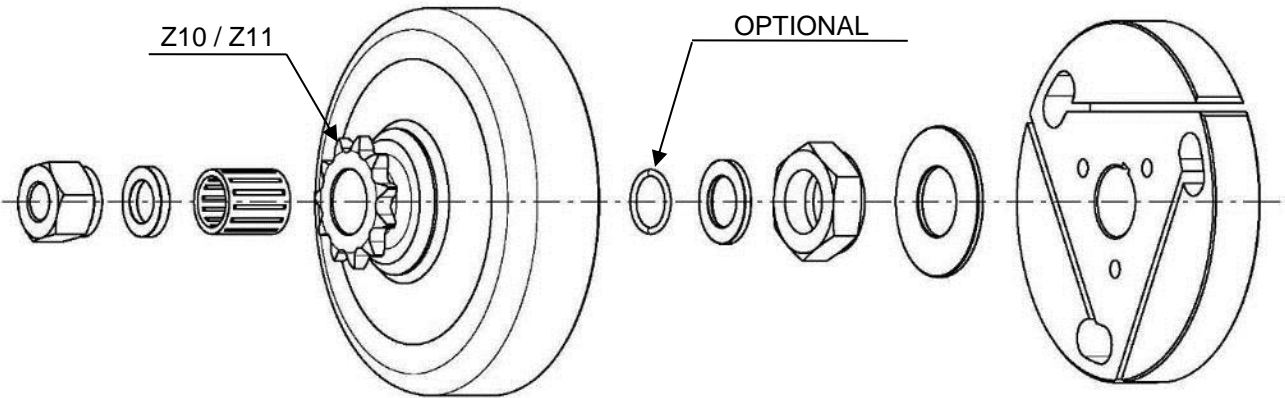


INLET SYSTEM EXPLODED VIEW

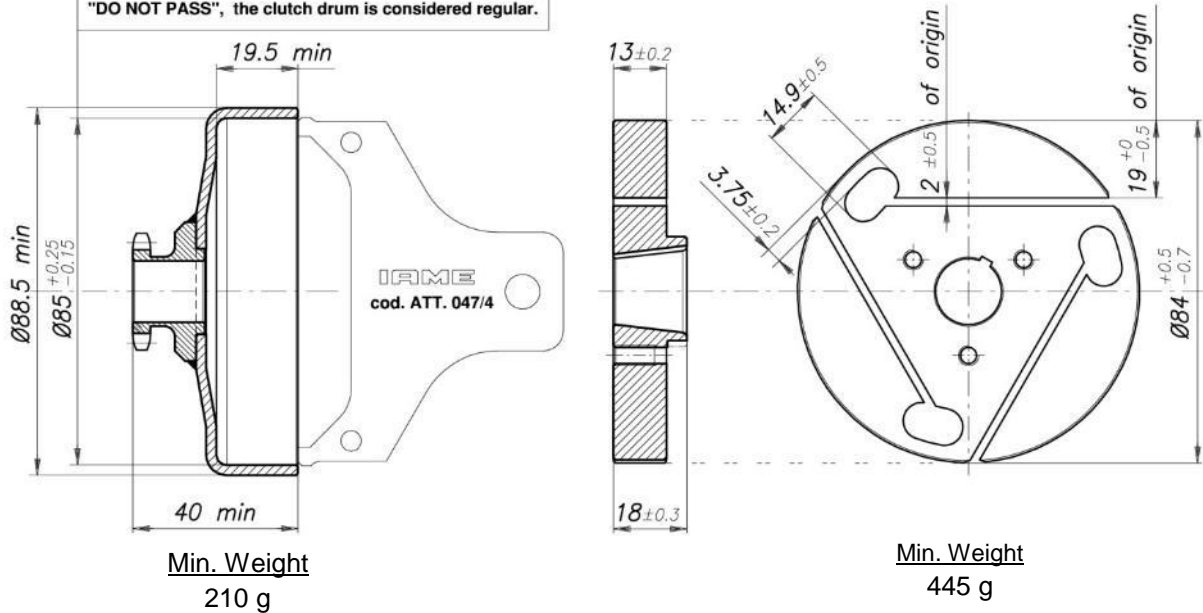




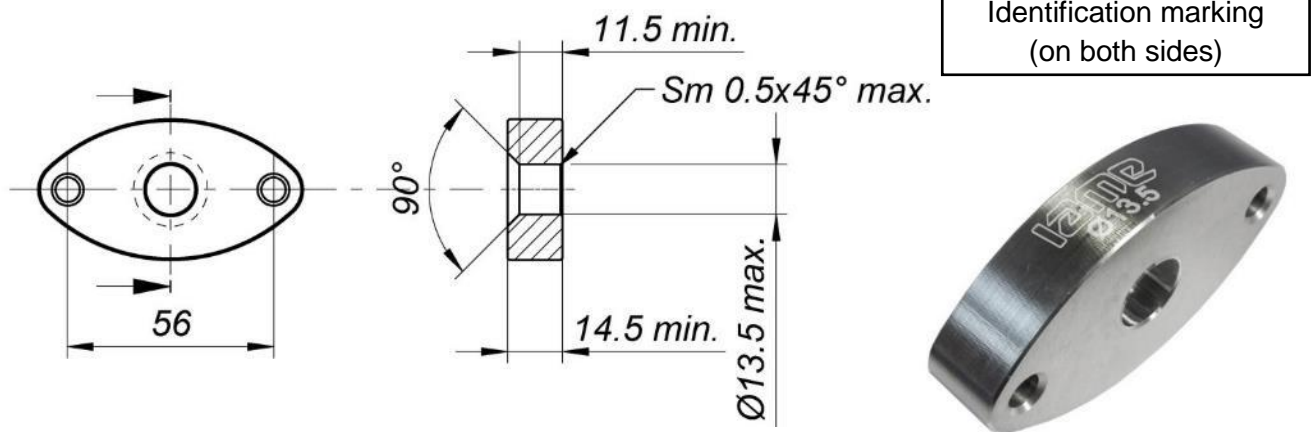
## DESCRIPTION OF THE CLUTCH



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

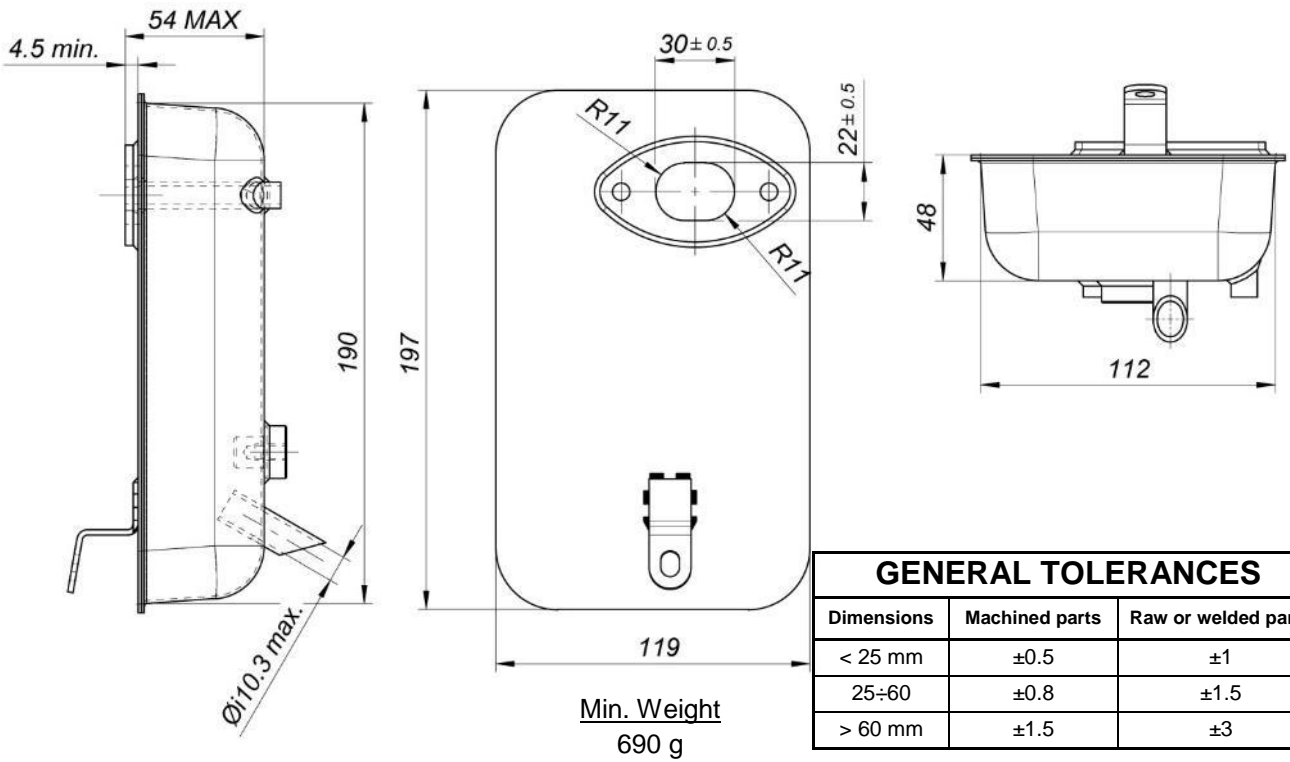


## EXHAUST MANIFOLD



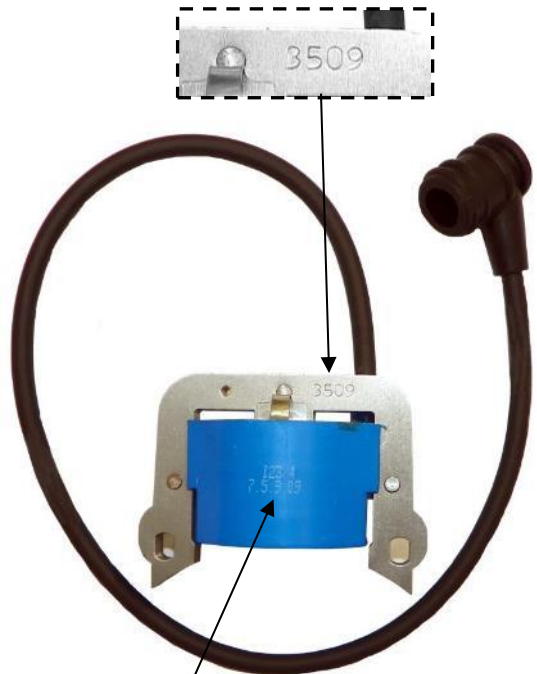
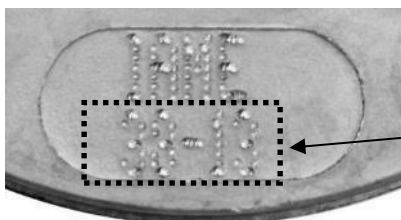


## EXHAUST MUFFLER VIEW AND DIMENSIONS



## IGNITION PHOTO IDENTIFICATION MARKING

Min. Weight  
362 g

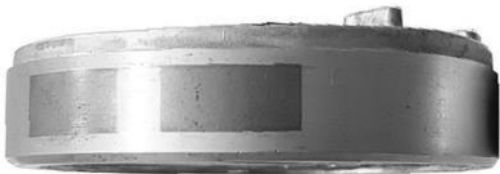


**VARIABLE**

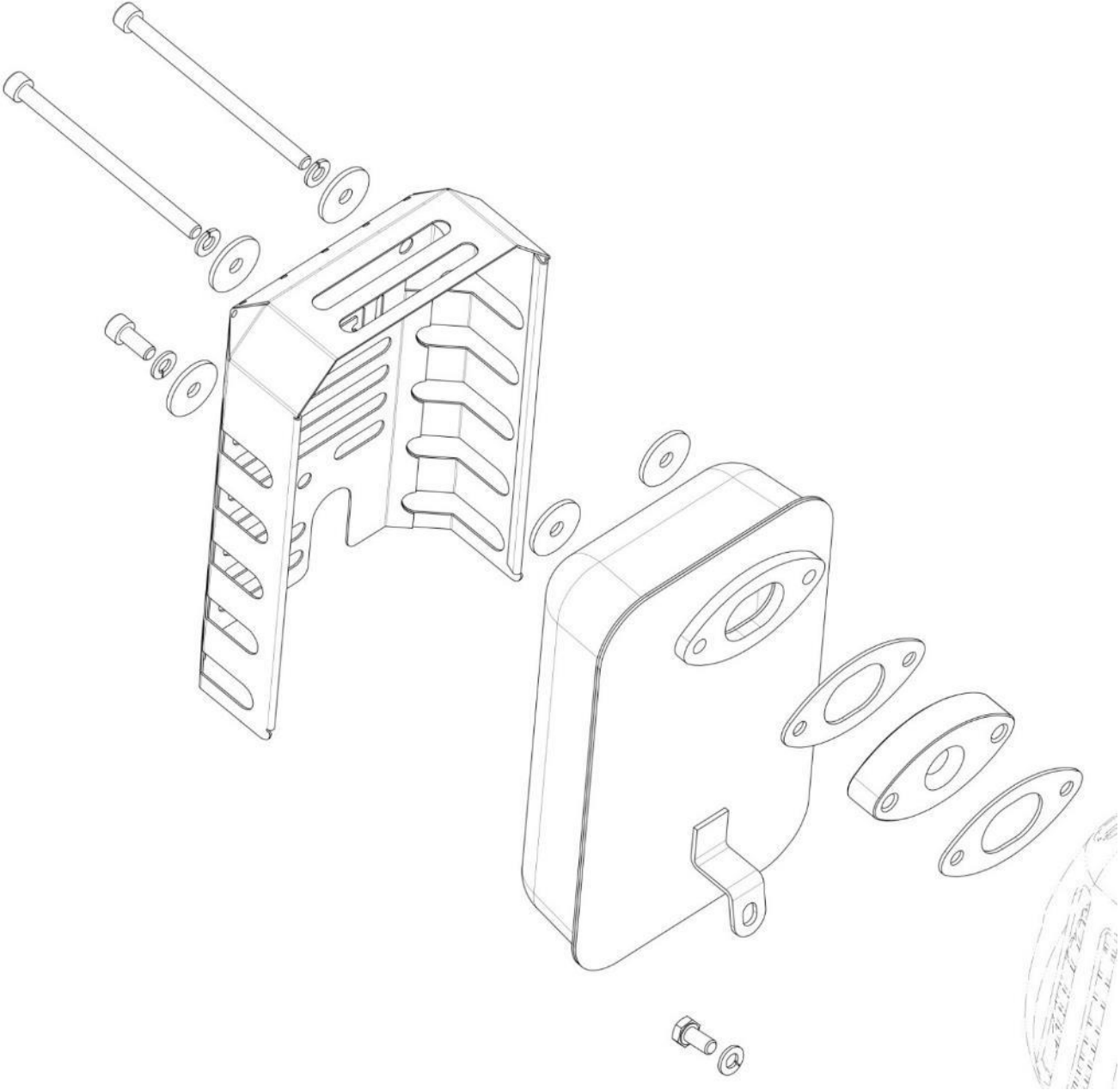
**ALTERNATIVE IGNITION ROTOR**

**CURRENT ROTOR**

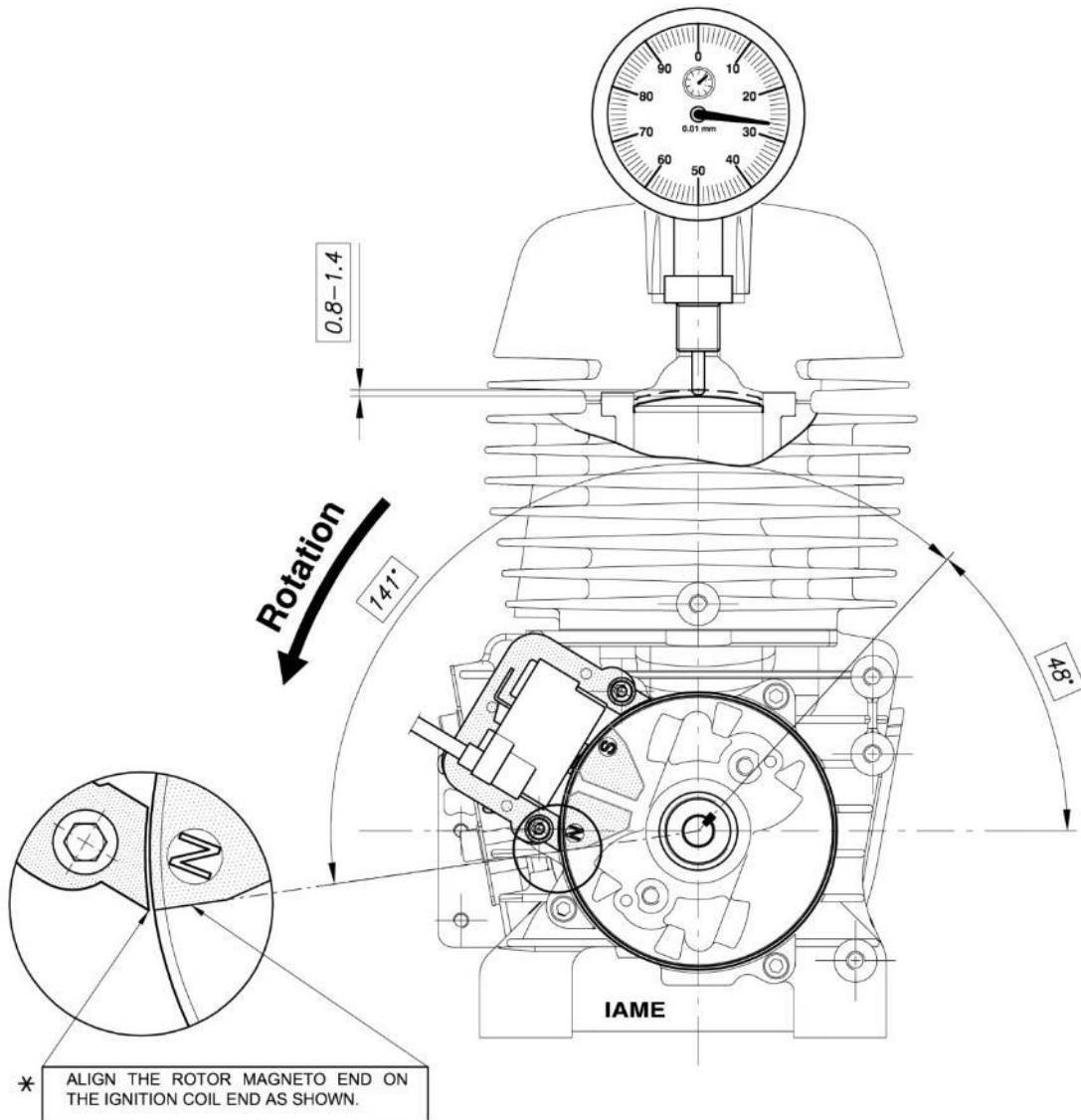
**NEW ROTOR**



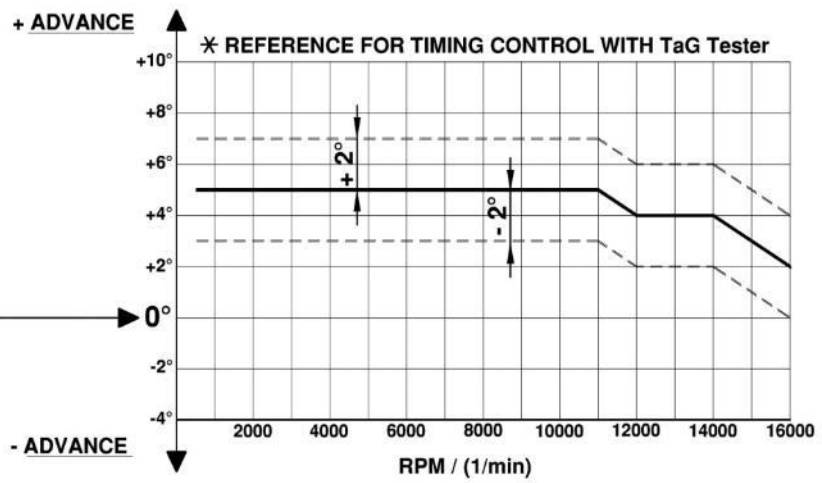
EXHAUST SYSTEM EXPLODED VIEW



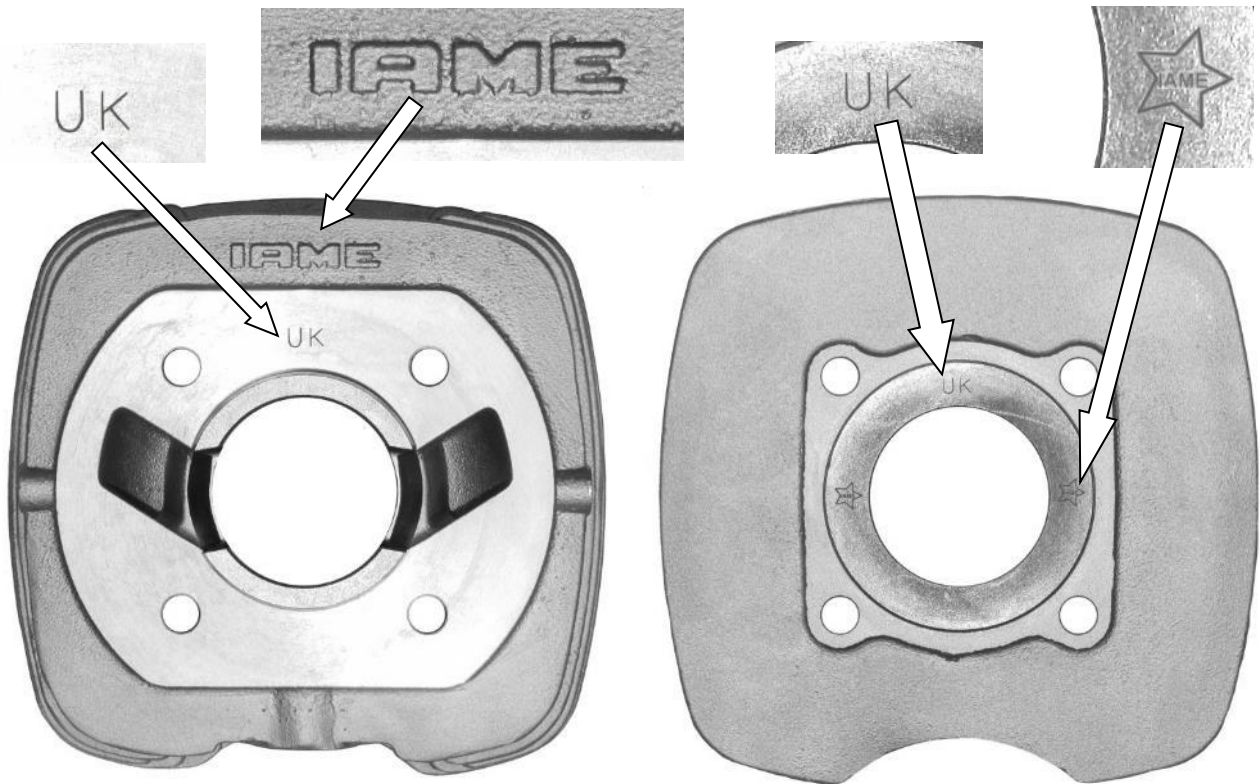
# SCHEME FOR ADVANCE CONTROL



## ADVANCE CURVE GRAPHS

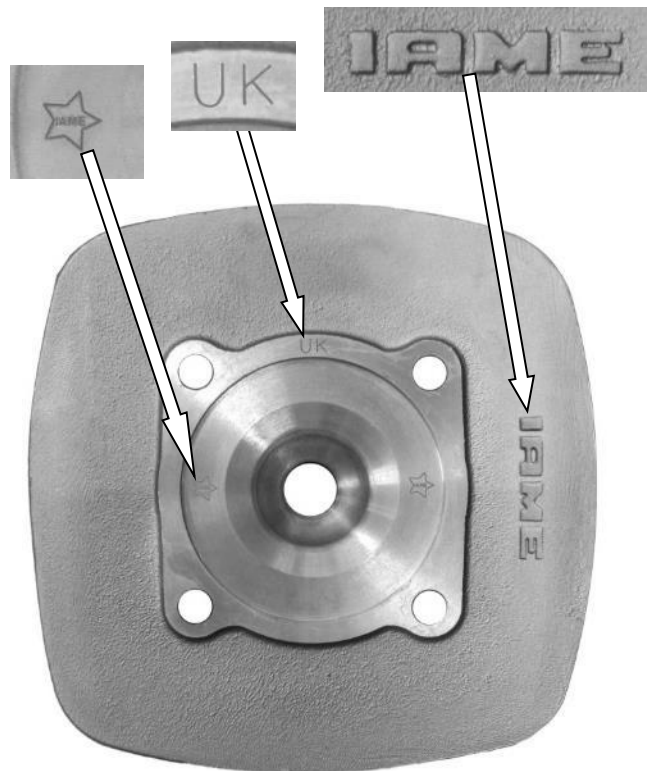
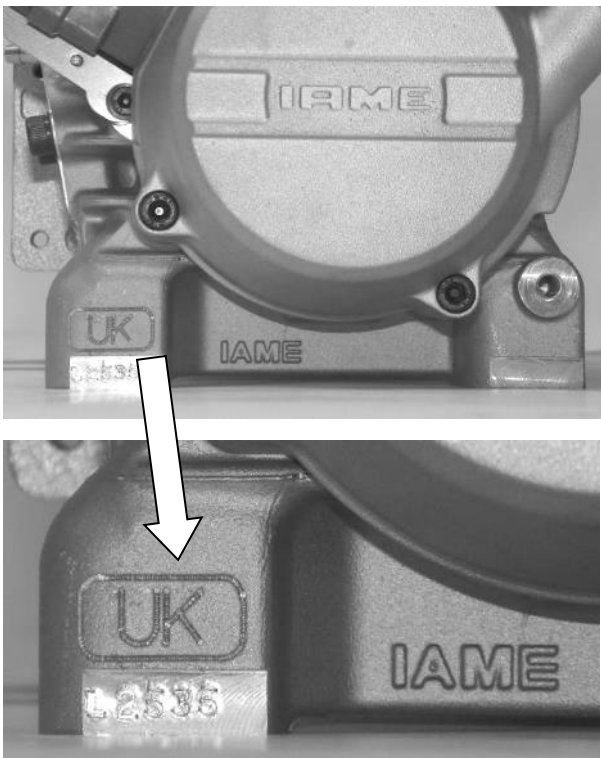


CYLINDER IDENTIFICATION MARKING



CRANKCASE IDENTIFICATION MARKING

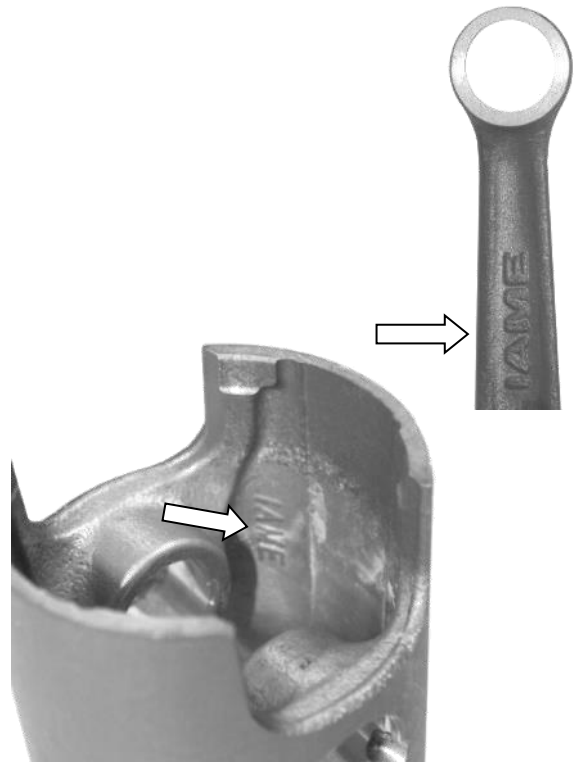
CYLINDER HEAD IDENTIFICATION MARKING



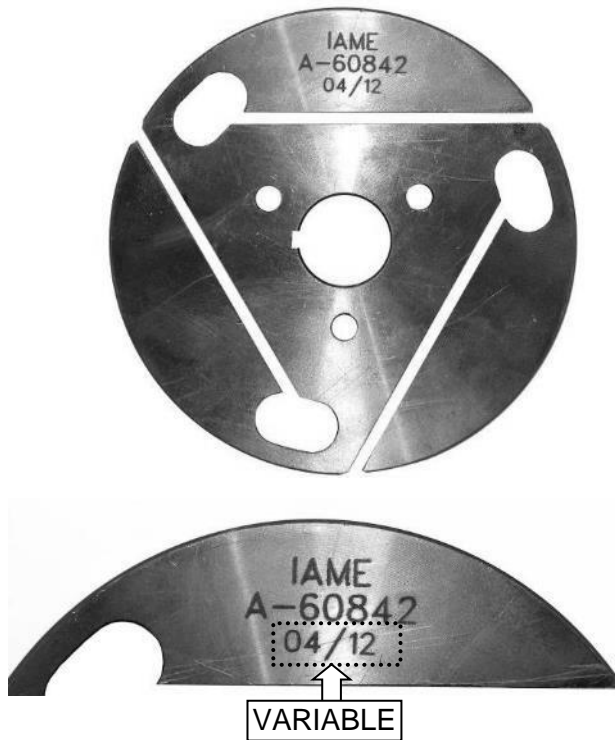
EXHAUST IDENTIFICATION MARKING



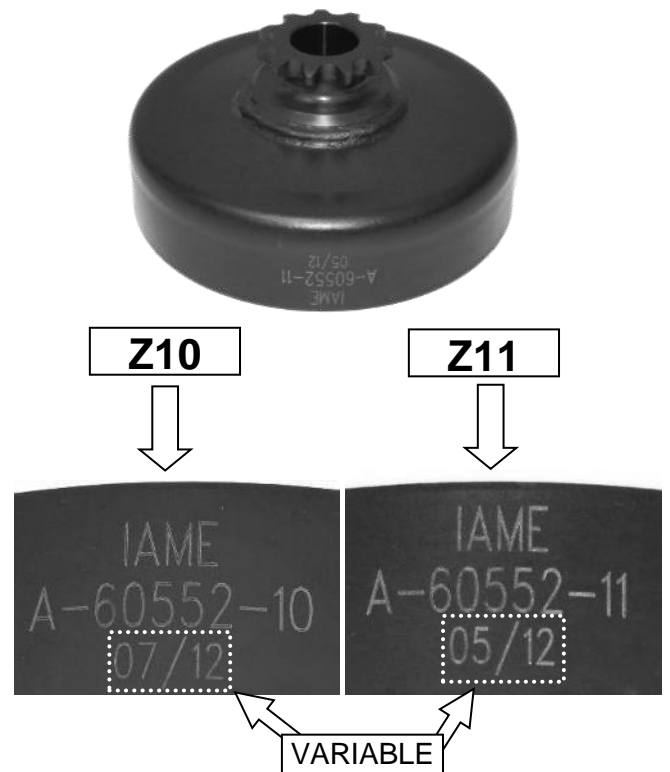
CONROD / PISTON IDENTIFICATION MARKINGS



CLUTCH HUB IDENTIFICATION MARKING

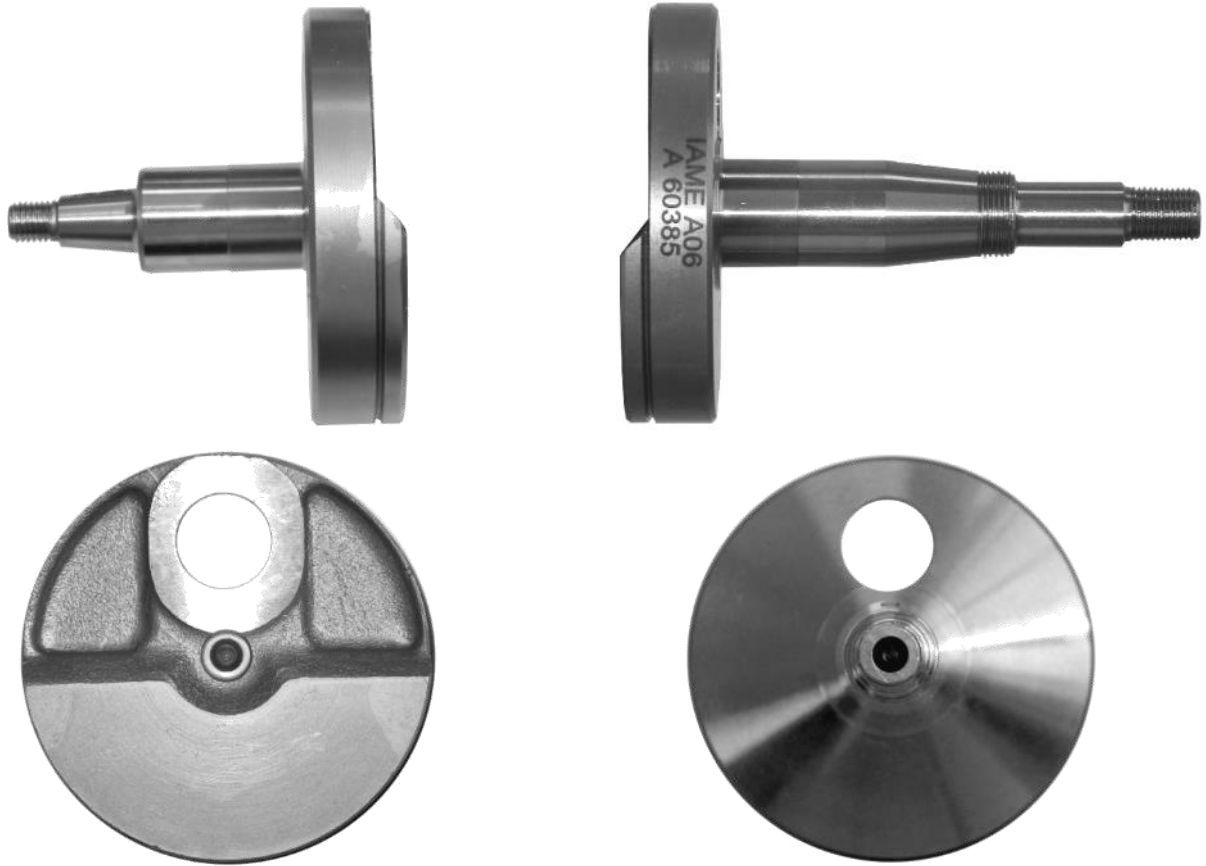


CLUTCH DRUM IDENTIFICATION MARKING



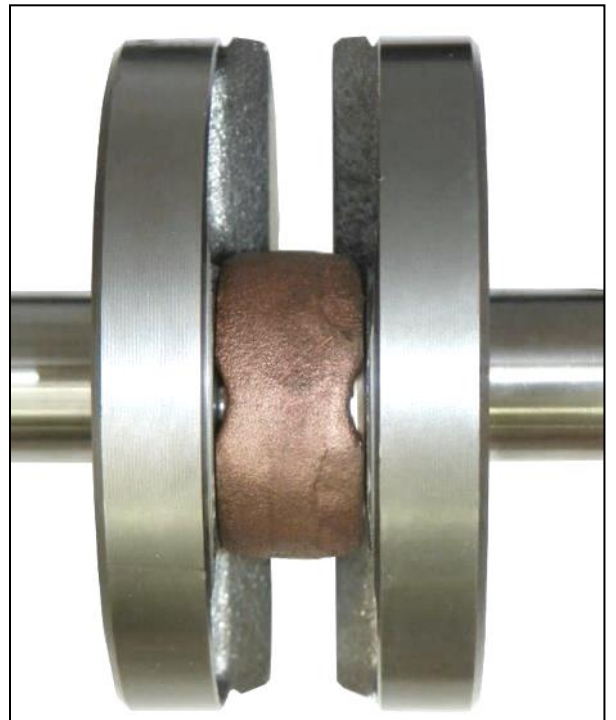


CRANKSHAFT PHOTOS



CRANKSHAFT IDENTIFICATION MARKINGS

PARTICULAR OF COMPLETE CRANKSHAFT





ALTERNATIVE CLUTCH DRUM



Z10



Z11



VARIABLE

ALTERNATIVE CLUTCH COVER



ALTERNATIVE



PULLEY PHOTO IDENTIFICATION MARKING

VARIABLE



COMPONENTS WITH ALTERNATIVE NEW LOGO "IAME"

CYLINDER HEAD



NEW LOGO



CYLINDER



NEW LOGO



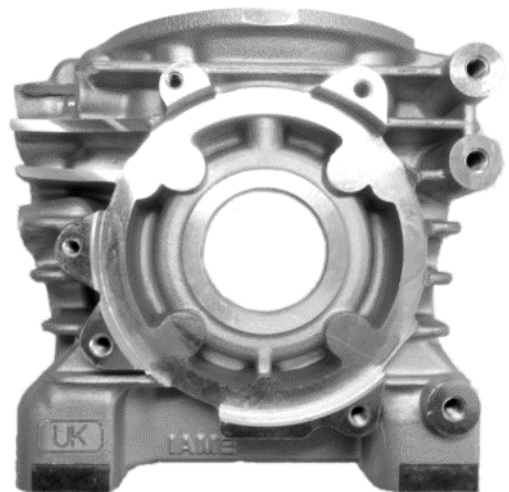
SEMICARTER TRANSMISSION SIDE



NEW LOGO



SEMICARTER IGNITION SIDE

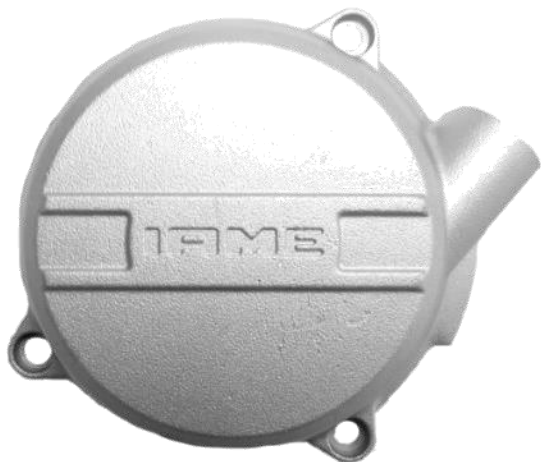


NEW LOGO



COMPONENTS WITH ALTERNATIVE NEW LOGO "IAME"

RECOIL COVER



NEW LOGO



CLUTCH COVER



NEW LOGO



EXHAUST



NEW LOGO



COMPONENTS WITH ALTERNATIVE NEW LOGO "IAME"

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

I A M E

or

**IAME**

**NOW COULD BE MARKED WITH NEW LOGO "IAME"**

IAME

or

IAME

or

IAME





**CARBURETTOR**  
**Tillotson HS-325A**



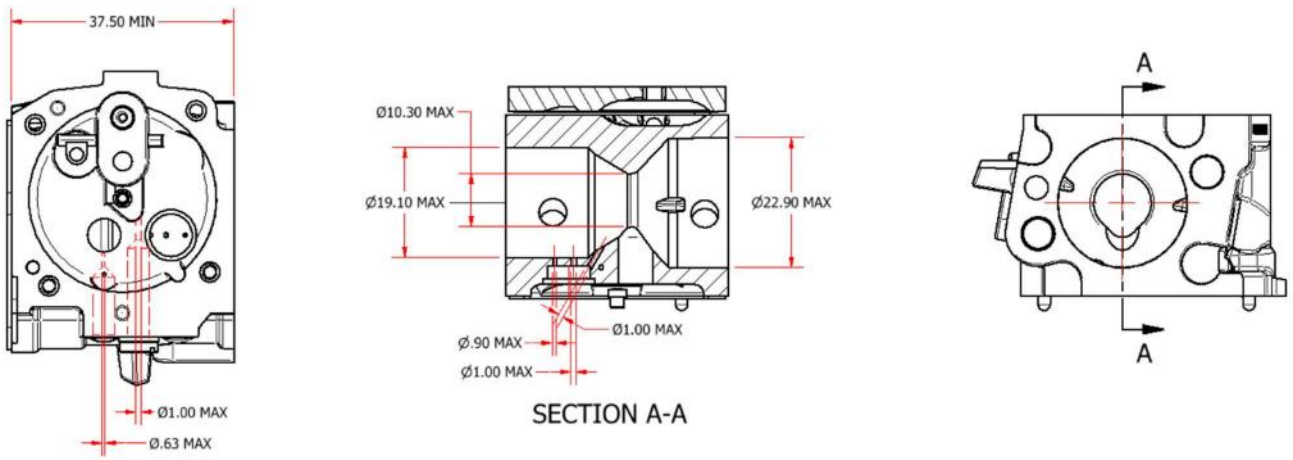
PHOTO OF ADJUSTING SIDE



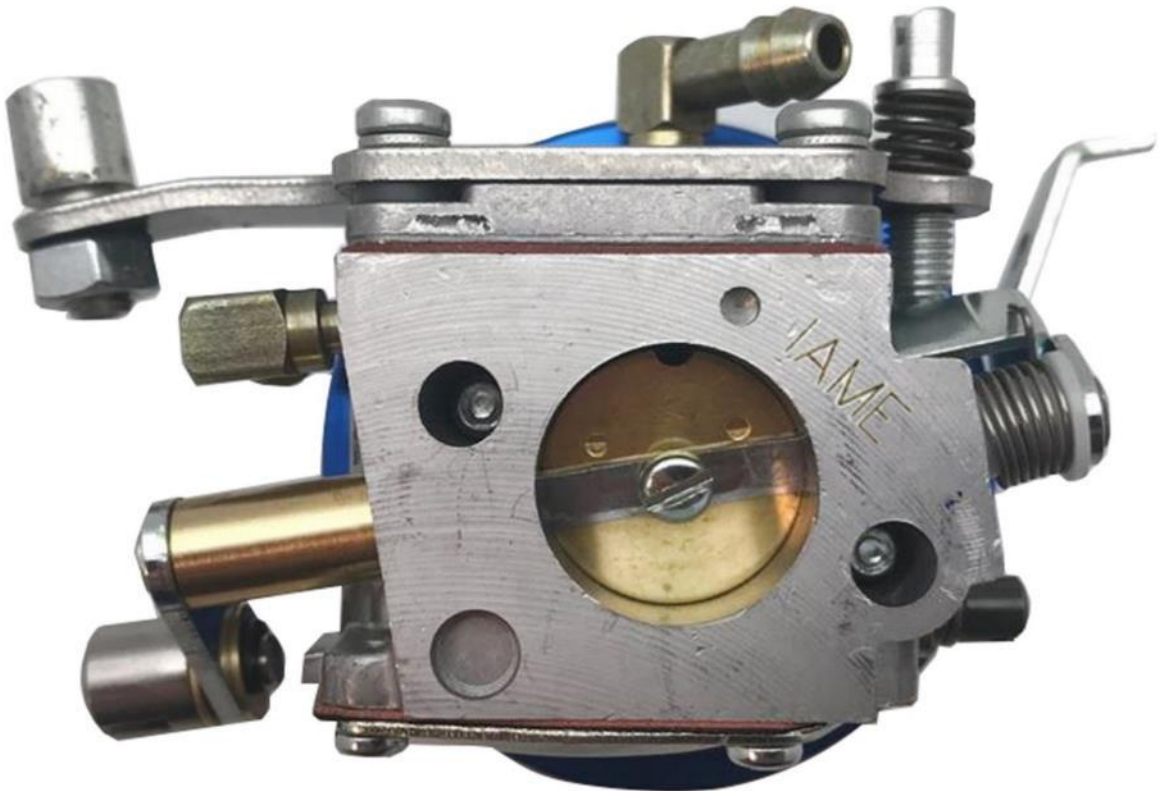
PHOTO OF INLET SIDE

Manufacteur	<b>TILLOTSON LTD.</b>
Make	<b>TILLOTSON</b>
Model	<b>HS-325A</b>

## SECTION VIEW



## "IAME" MARKING

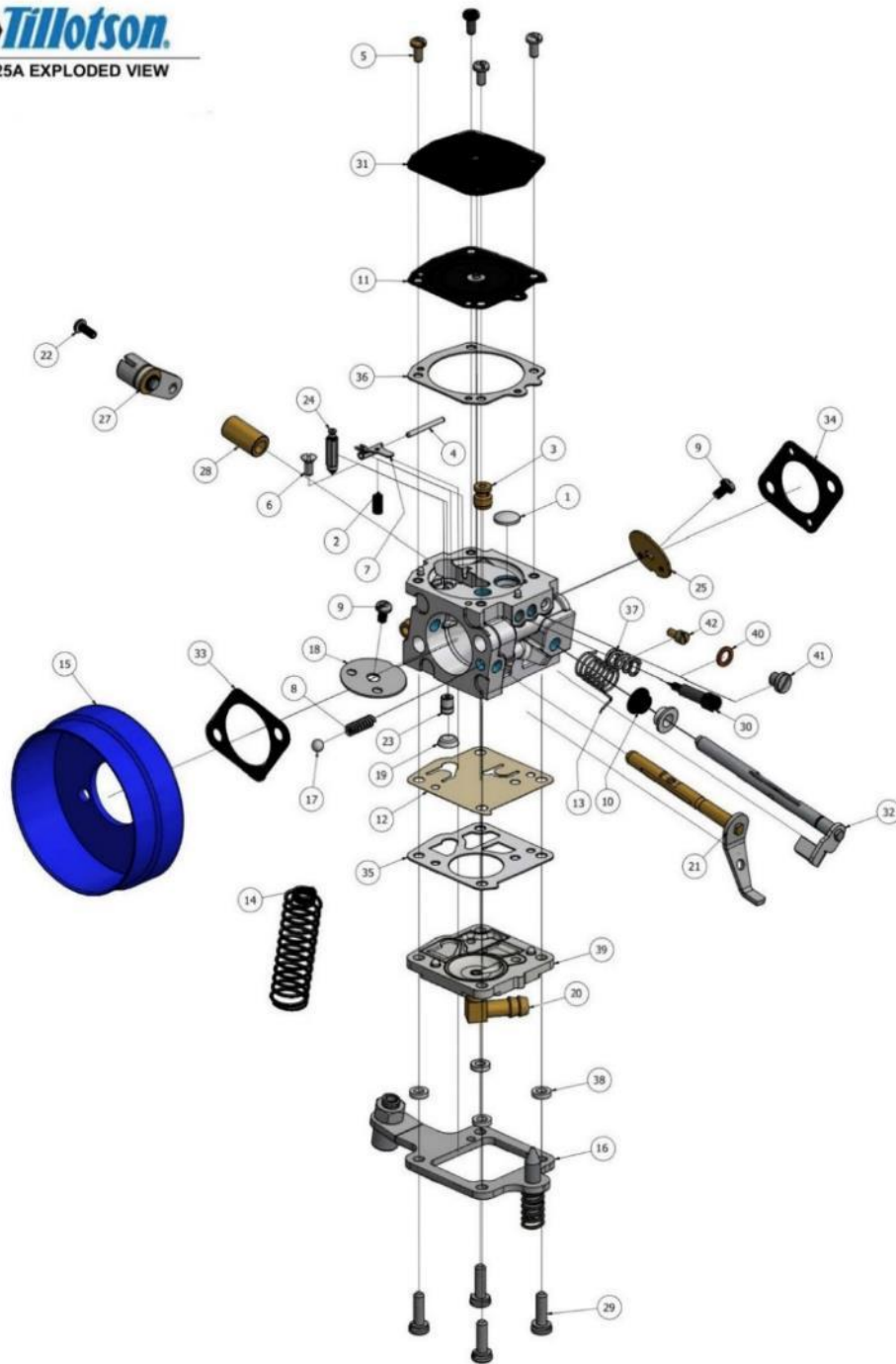




# CARBURETTOR DESCRIPTION AND SKETCH OF PARTS



HS-325A EXPLODED VIEW



ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION	ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	179-59	* WELCH PLUG	18	1	27-392	CHOKE SHUTTER	35	1	16-B514	++ PUMP GASKET (ORANGE)
2	1	24-B323	INLET TENSION SPRING 26g	19	1	95-177	FILTER SCREEN	36	1	16-B513	++ METERING GASKET (ORANGE)
3	1	363-598	CHECK VALVE	20	1	68-307	FUEL CONNECTOR	37	1	24-B449	ADJUSTMENT GASKET SPRING
4	1	32-78	FULCRUM PIN	21	1	26-1279	CHOKE SHAFT & LEVER ASSEMBLY	38	4	78-A351	NYLON WASHER
5	4	15-C19	4-40 UNC SCREW	22	1	15-B348	3-48 UNC SCREW	39	1	91-1036	PUMP COVER ASSEMBLY
6	1	15-B345	FULCRUM PIN SCREW	23	1	36-A33	INLET SEAT	40	1	16-B184	RUBBER WASHER
7	1	155-A71	* FULCRUM LEVER	24	1	34-216	+ INLET NEEDLE	41	1	15-C135	SCREW - CAP
8	1	24-B281	SPRING	25	1	14-A133	THROTTLE SHUTTER	42	1	49-B134	FIXED JET - .43MM
9	2	15-C20	4-40 UNC SCREW	26	1	219-D281	MACHINED BODY				
10	2	102-204	PLASTIC SLEEVE	27	1	12-1228	THROTTLE LEVER & SWIVEL ASSEMBLY			*	REPAIR KIT CONTENTS
11	1	237-653	++ METERING DIAPHRAGM	28	1	102-236	BRASS SLEEVE			+	DIAPHRAGM & GASKET SET CONTENTS
12	1	237-143	++ TEFLON PUMP DIAPHRAGM	29	4	15-C127	6-32 SCREW & LOCK WASHER				
13	1	24-C29	THROTTLE RETURN SPRING	30	1	43-A268	M4 X 0.5 ADJUSTMENT SCREW			RK-28HS	REPAIR KIT
14	1	24-C34	CABLE RETURN SPRING	31	1	91-A274	METERING COVER			DG-7HS	DIAPHRAGM & GASKET SET
15	1	SA-506	CHOKE TRUMPET	32	1	13-2160	THROTTLE SHAFT & LEVER ASSEMBLY				
16	1	136-569	CABLE BRACKET ASSEMBLY	33	1	16-B384	++ FLANGE GASKET (CHOKE)				
17	1	206-121	BRASS BALL	34	1	16-B228	++ FLANGE GASKET (THROTTLE)				

PARTS OF CARBURETTOR

REF.36 - P. N°16-B513  
DIAPHRAGM GASKET  
(ORANGE COLOR)



Thickness =  $0.5 \pm 0.1$  mm

REF.35 - P. N° 16-B514  
PUMP DIAPHRAGM GASKET  
(ORANGE COLOR)



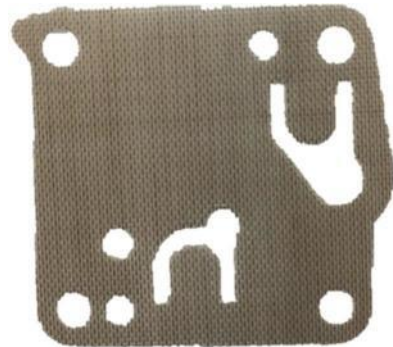
Thickness =  $0.5 \pm 0.1$  mm

REF.11 - P. N°237-601  
DIAPHRAGM



Thickness =  $0.15 \pm 0.05$  mm

REF.12- P. N°237-143  
PUMP DIAPHRAGM



Thickness =  $0.21 \pm 0.05$  mm

REF.31 - P. N° 91-A274  
DIAPHRAGM COVER



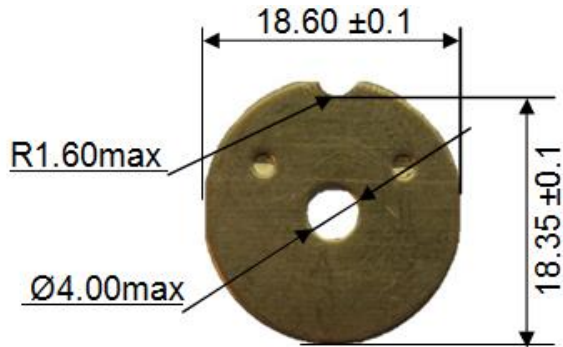
Thickness =  $3.10 \pm 0.15$  mm

REF.39 - P. N° 91-1036  
PUMP COVER



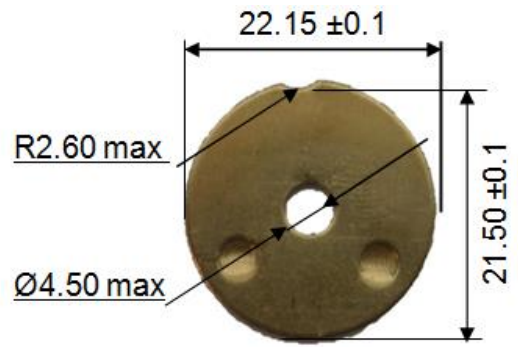
Thickness =  $6.30 \pm 0.15$  mm

**REF.25 - P. N° 14-A135  
THROTTLE SHUTTER**



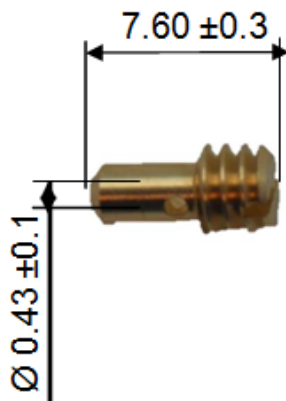
Thickness = 0.81 ± 0.1 mm

**REF.18 - P. N° 27-392  
CHOKE SHUTTER**

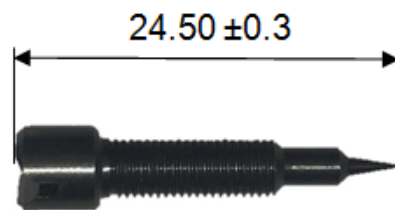


Thickness = 0.81 ± 0.1 mm

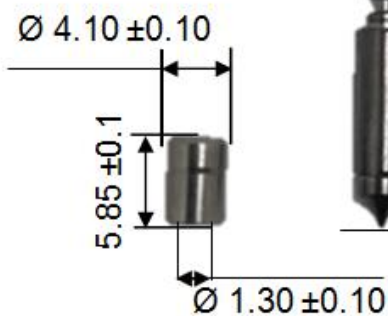
**REF.42 - P. N° 49-B134  
FIXED JET - 0.43mm**



**REF.30 - P. N° 43-A268  
NEEDLE HIGH SPEED**



**REF.23 - P. N° 36-A33  
INLET SEAT**



**REF.24 - P. N° 34-216  
INLET NEEDLE**



**REF.15 - P. N° SA-506  
CHOKE TRUMPET**

