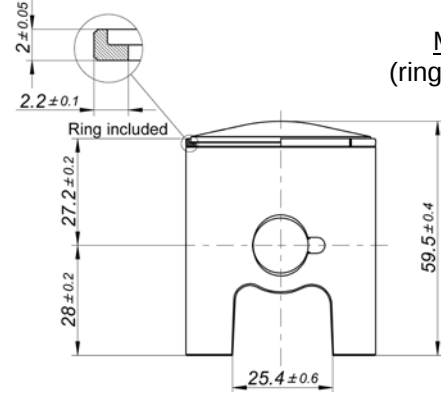
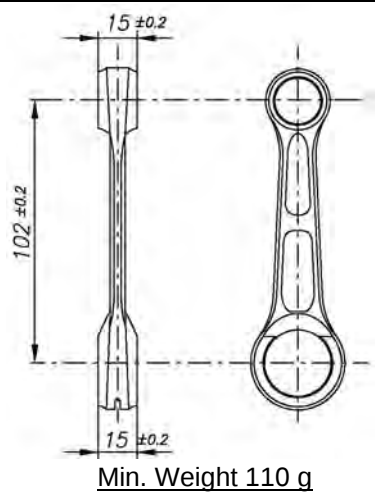
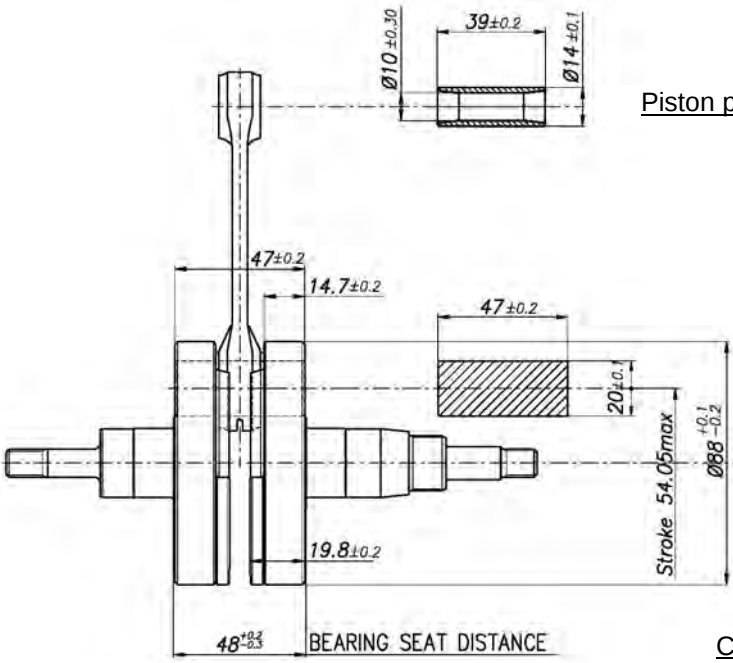
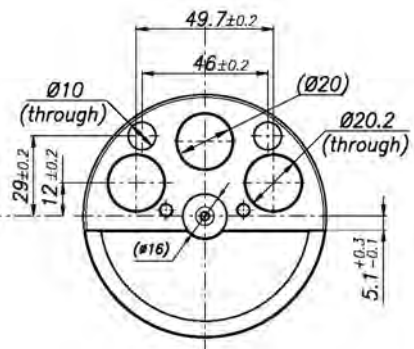


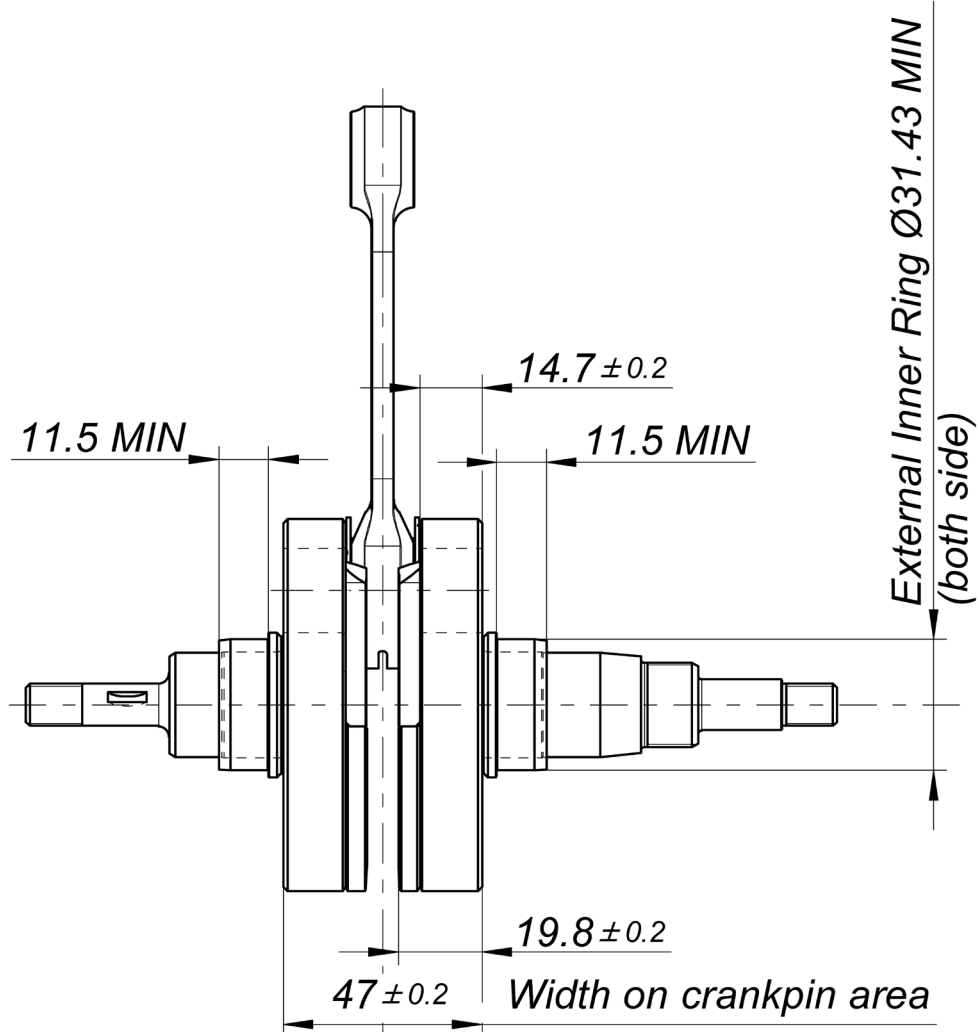
100cc REEDJET USA – TAG

FEATURES

		Cylinder Volume	100 cm ³ max
		Bore	48.20 mm
		Max. bore	48.55 mm
		Stroke	54.05 mm max
		Cooling system	Air
		Inlet system	Reed valve
		Number of carbs	1
Tillotson Carburettor	HW-33A Ø24mm	Cylinder / crankcase transfers n°	3 / 3
Number of piston rings	1	Transfers / Exhaust ports number	3 / 3
Big end contr. ball-bearing diam.	20x26x15	Combustion chamber shape	Spherical
Crankshaft ball-bearing diam.	25x52x15	Selettra ignition (adjustable)	Analogue 2 Poles
Small end contr. ball-bearing diam.	14x18x18	Distance between Conrod centres	102 mm

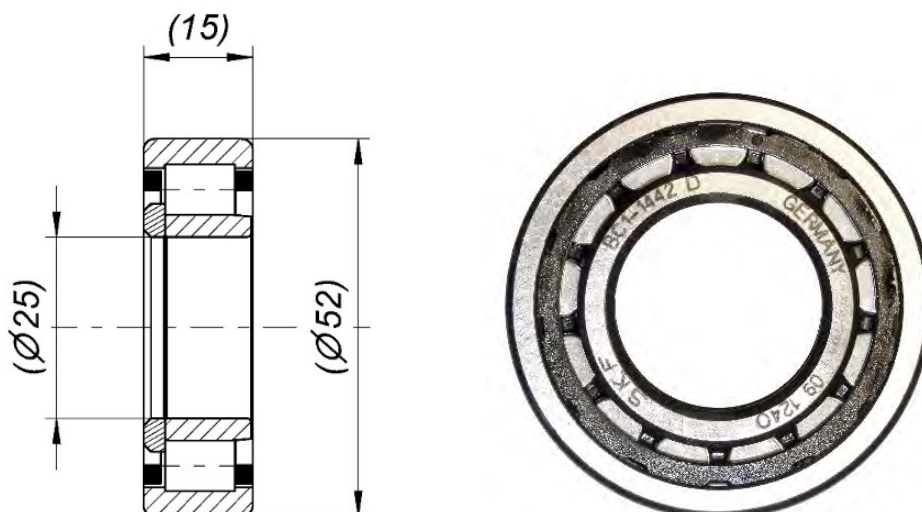
DESCRIPTION OF THE MATERIAL		PISTON	
Conrod material	Steel		
Crankshaft material	Steel		
Head material	Aluminium		
Cylinder material	Aluminium		
Liner material	Cast Iron		
		DISTANCE BETWEEN CONROD CENTERS	
Crankcase material	Aluminium		
Piston material	Aluminium		
Piston rings material	Cast Iron		
Exhaust muffler material	Sheet-steel		
Bearings	6205 type or BC1-1442D		
CRANKSHAFT			
		Piston pin min. weight 19 g 	
		Complete Crankshaft min. weight 1820 g	

DIMENSIONS OF ALTERNATIVE CRANKSHAFT WITH ROLLER MAIN BEARING

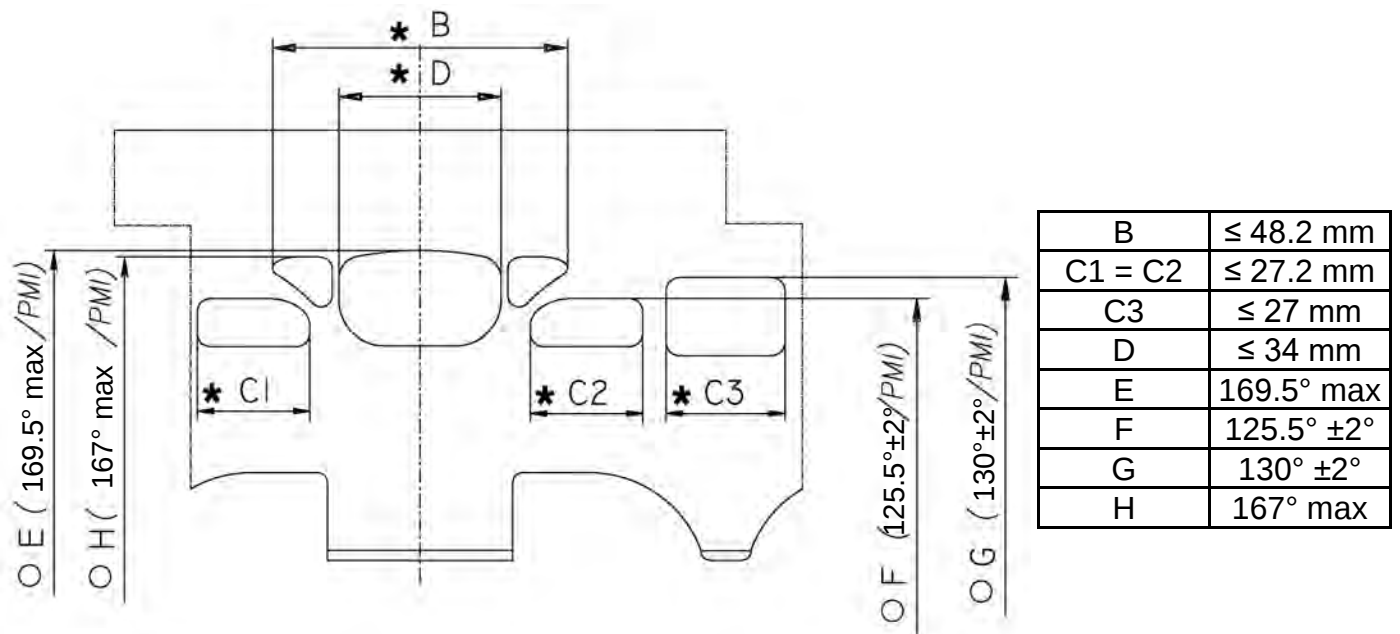


Complete crankshaft min. weight 1880 g

ROLLER MAIN BEARING



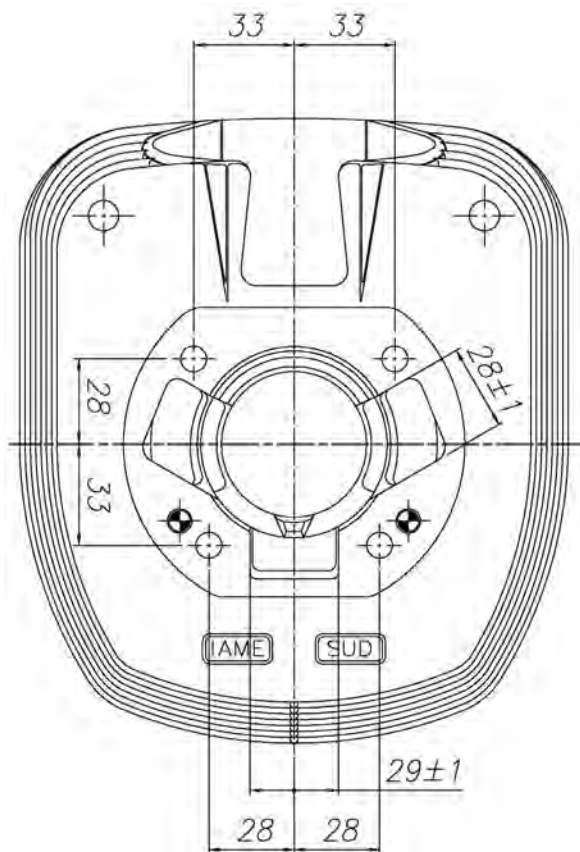
CYLINDER DEVELOPMENT



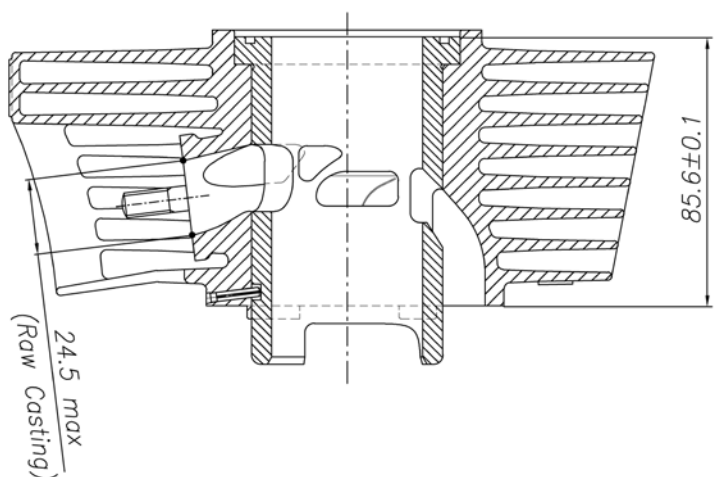
✱ CHORDAL READING

○ ANGULAR READING BY INSERTING A 0.2x5 mm GAUGE

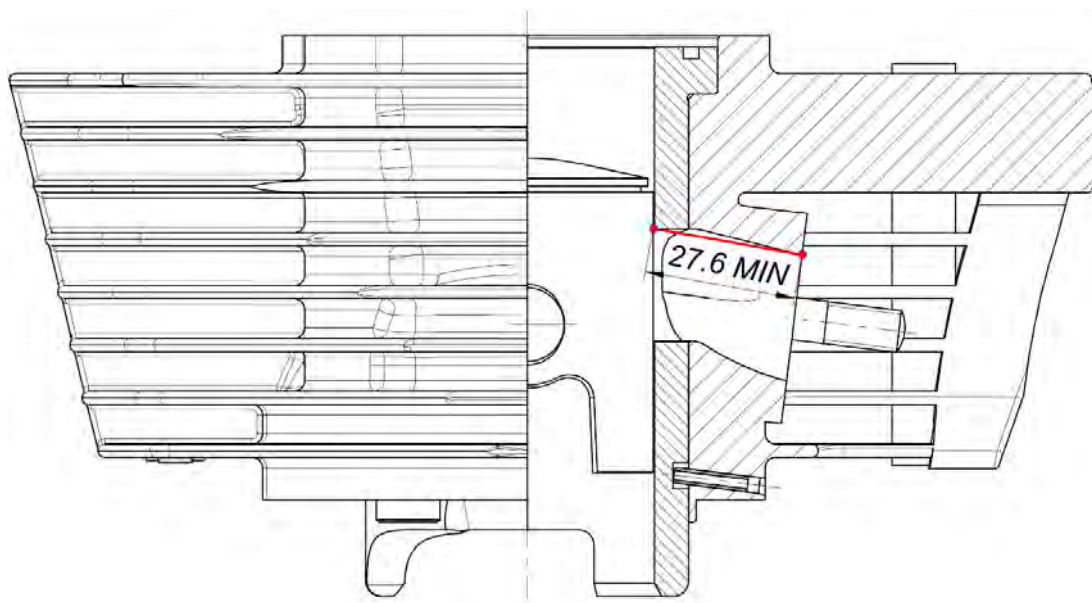
CYLINDER BASE VIEW



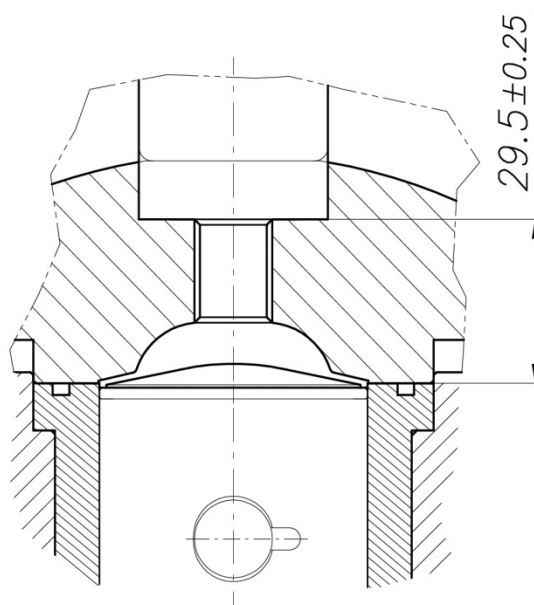
CYLINDER CROSS SECTION VIEW



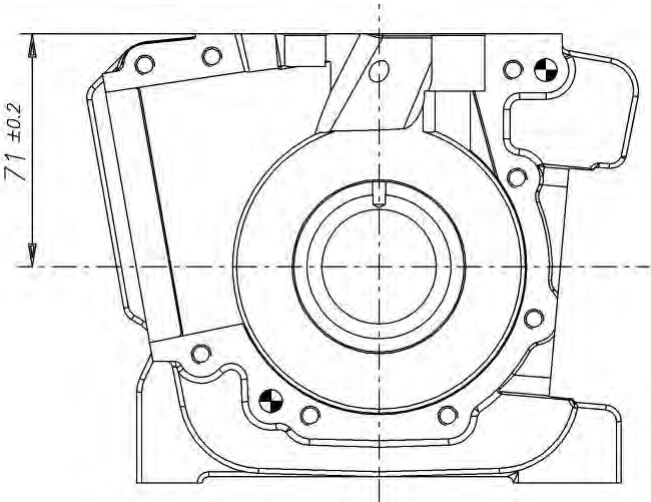
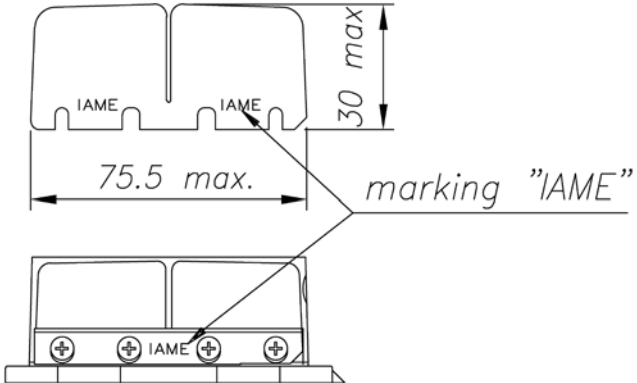
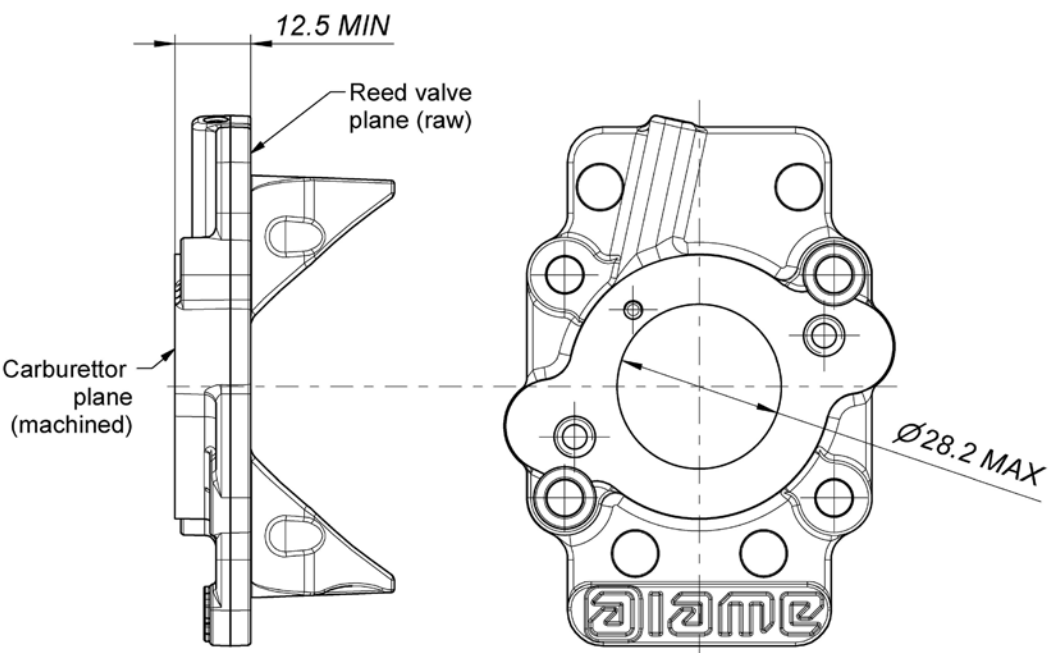
DISTANCE FROM EXHAUST FLANGE TO PISTON



COMBUSTION CHAMBER VIEW



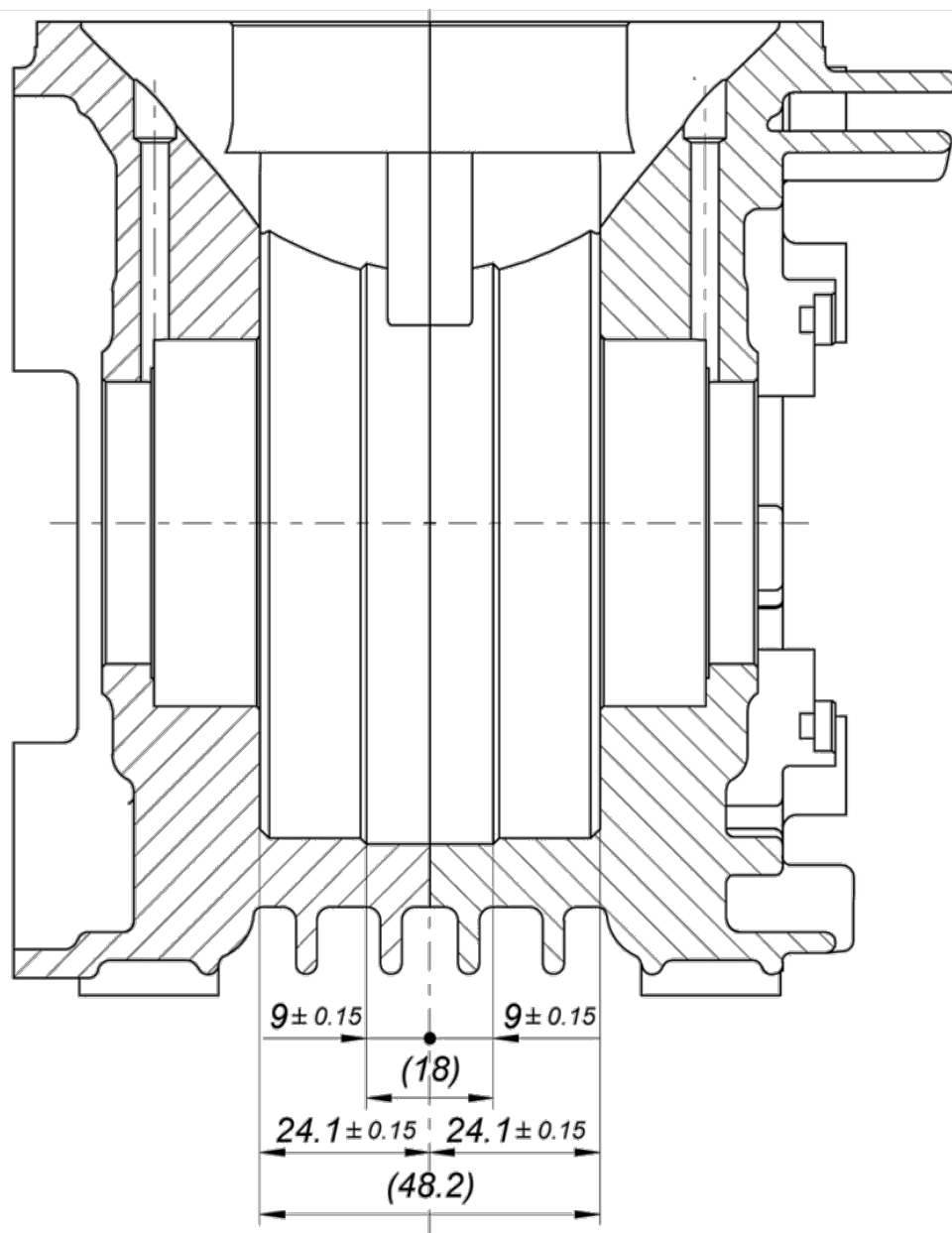
SQUISH MIN.= 0.0413" (1.05 mm)
(measured with 0.0625" (1/16") / Ø1.58mm solder)

CRANKCASE INSIDE VIEW	REEDS DIMENSIONS
 71 ±0.2	 30 max 75.5 max. IAME IAME marking "IAME" <u>Genuine IAME fiber glass reeds min. thickness 0.30mm</u>
INLET CONVERYOR DIMENSIONS	
 12.5 MIN Reed valve plane (raw) Carburettor plane (machined) Ø28.2 MAX IAME	

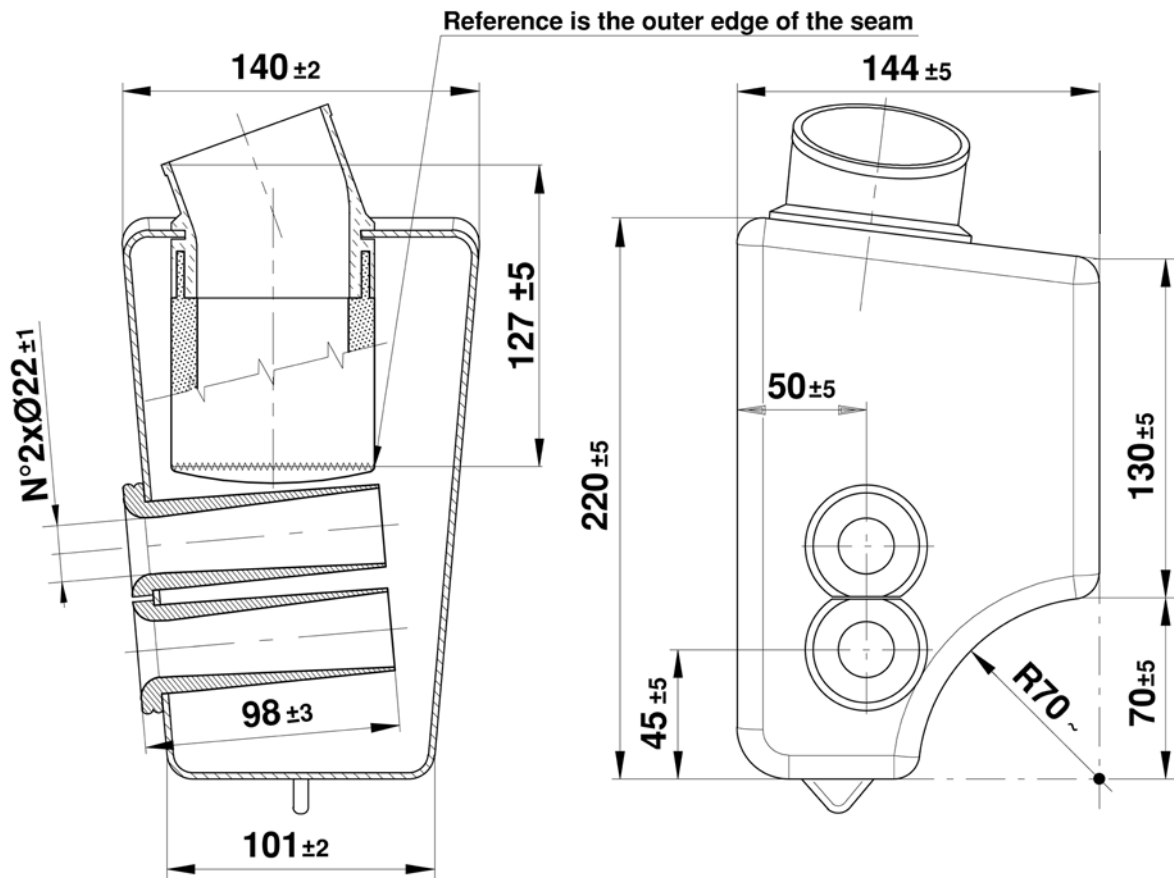
CRANKCASE WIDTH DIMENSIONS

DRIVE SIDE

IGNITION SIDE

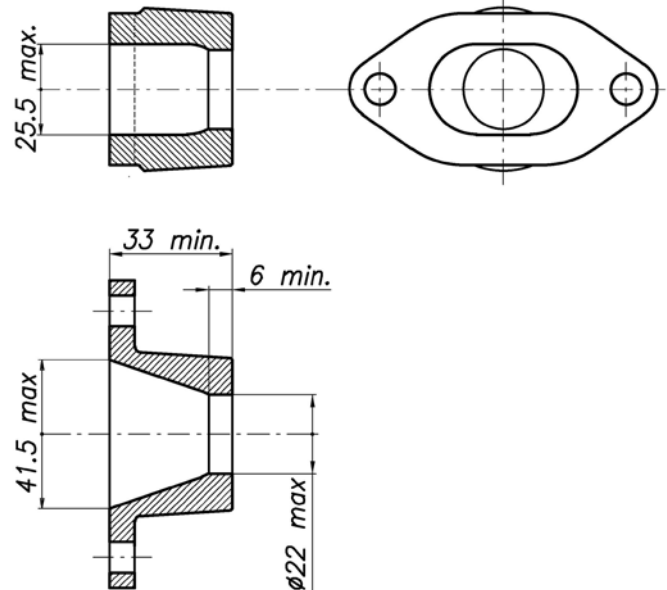
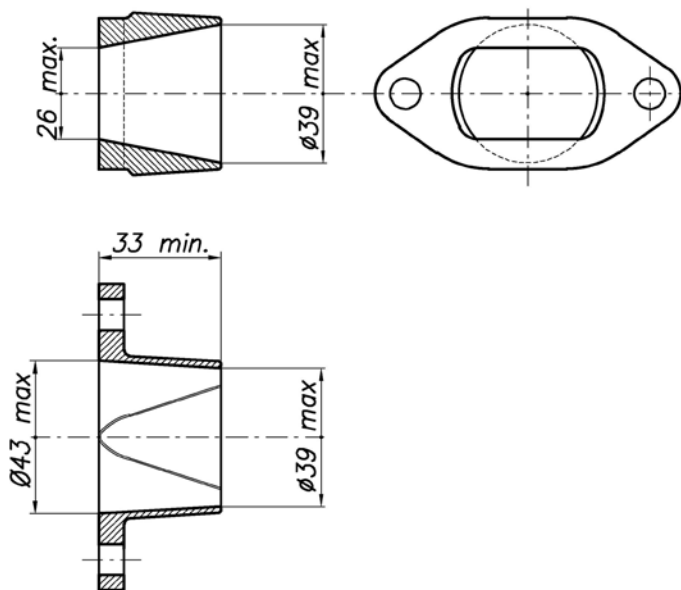


INLET SILENCERWITH SPONGE FILTER



EXHAUST MANIFOLD

EXHAUST MANIFOLD RESTRICTED



INLET SILENCER TUBES NEW TYPE

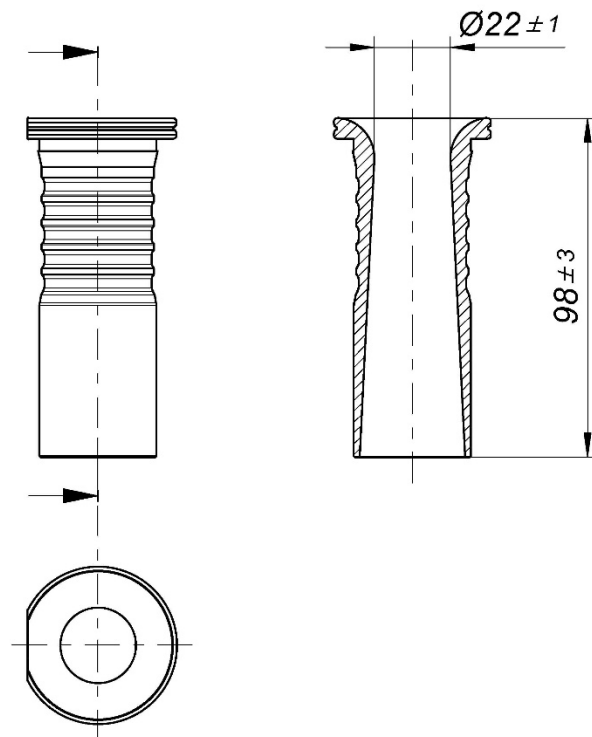


PHOTO IDENTIFICATION OF PERMISSIBLE INLET SILENCER TUBES



RAIN COVER INLET SILENCER – DRAWING

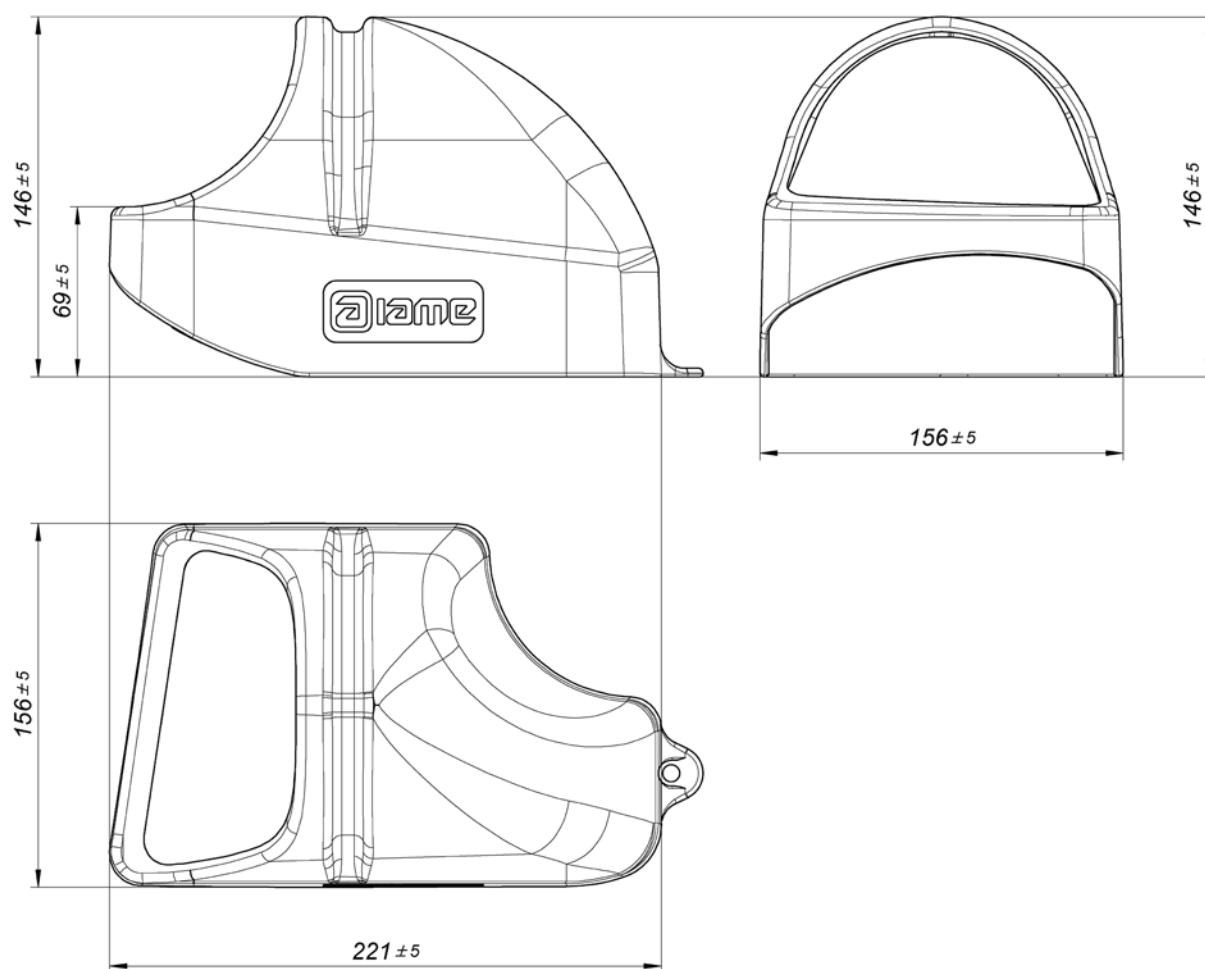
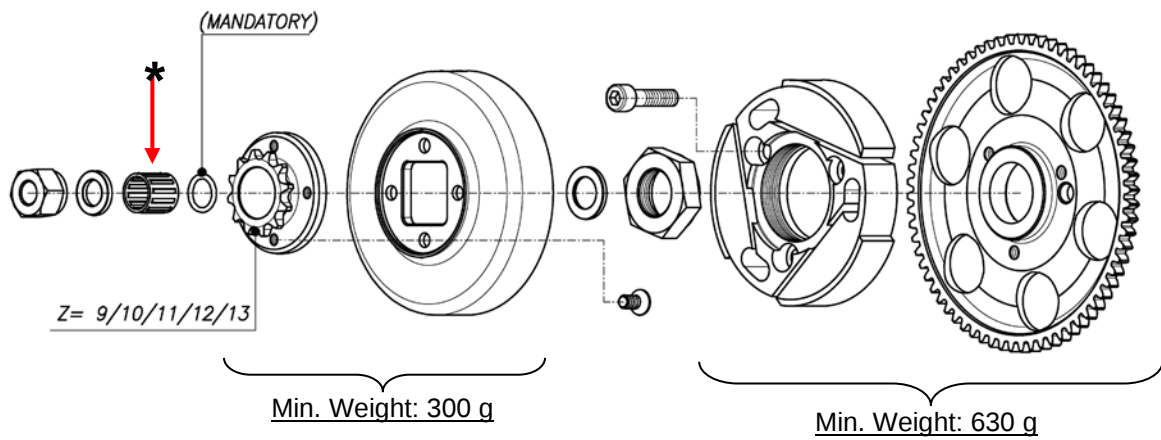


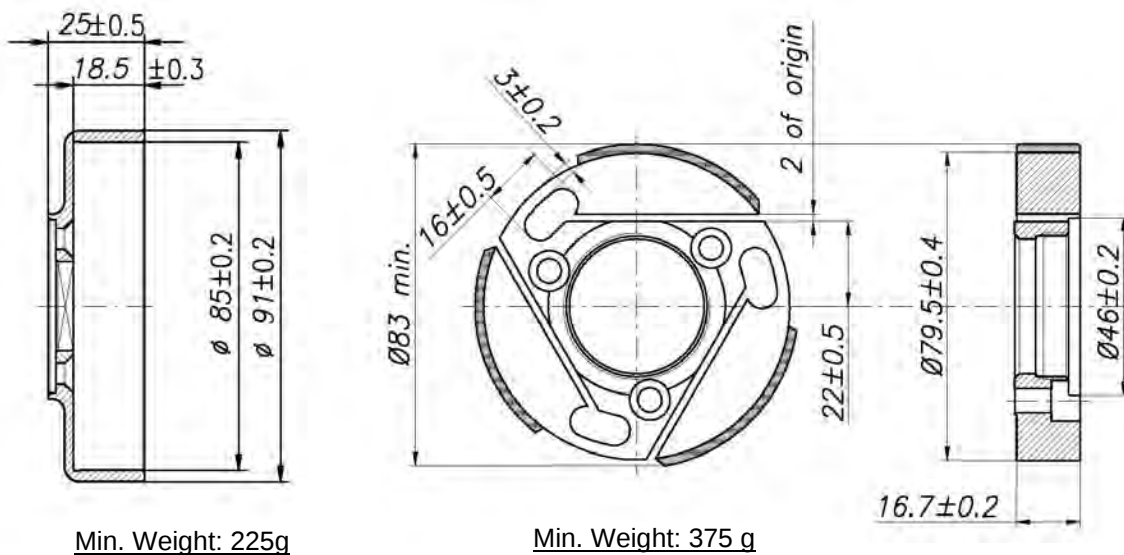
PHOTO IDENTIFICATION OF RAIN COVER INLET SILENCER



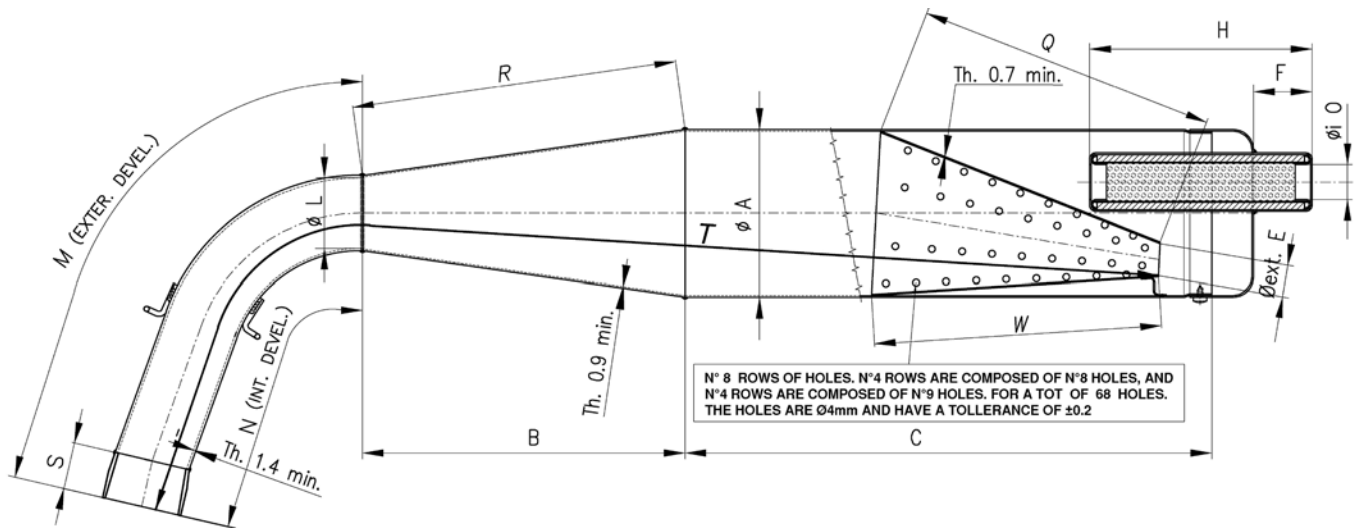
DESCRIPTION OF THE CLUTCH



* When using the Z9, the roller cage is replaced by a bronze bushing, pressed into the sprocket



EXHAUST VIEW AND DIMENSIONS
(valid also for alternative exhaust type)



Min. Weight: 1.905 g

ØA: <u>100 ±1 Øext.</u>	C: <u>315 ±3</u>	H: <u>132 ±3</u>	ØiO: <u>21 ±1 Øint.</u>	S: <u>29 ±1.5</u>
ØL: <u>45 ±1 Øext.</u>	ØE: <u>23.5 ±2 Øext.</u>	M: <u>270 ±3 ext.</u>	R: <u>194.5 ±3</u>	T: <u>692 ±3</u>
B: <u>193 ±3</u>	F: <u>36 ±2</u>	N: <u>210 ±3 ext.</u>	Q: <u>182 ±3</u>	W: <u>170 ±3</u>

ATTENTION:

The dimensions “**M**”, “**N**” and “**T**” must be taken by steel tape measure 6mm wide.

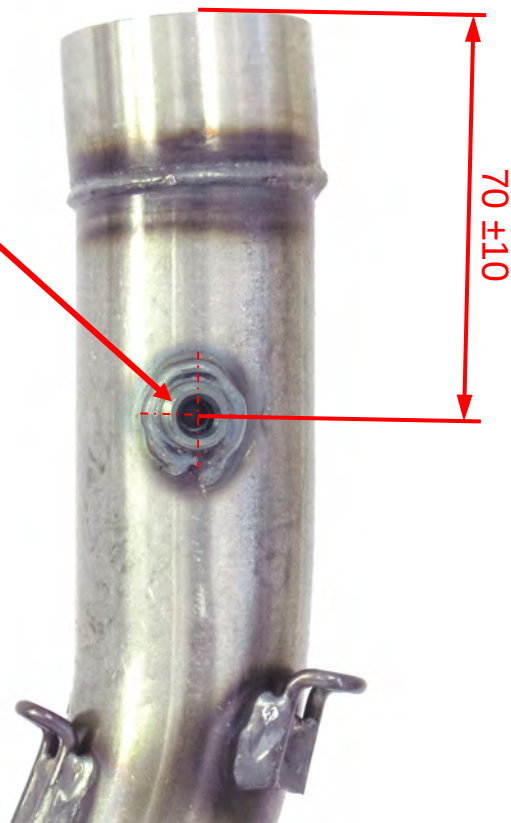
The dimensions “**Q**” and “**W**” must be taken by steel tape measure 12mm wide.

ALTERNATIVE EXHAUST



MARKING

Fitting for
temperature
probe



WIRING DIAGRAM

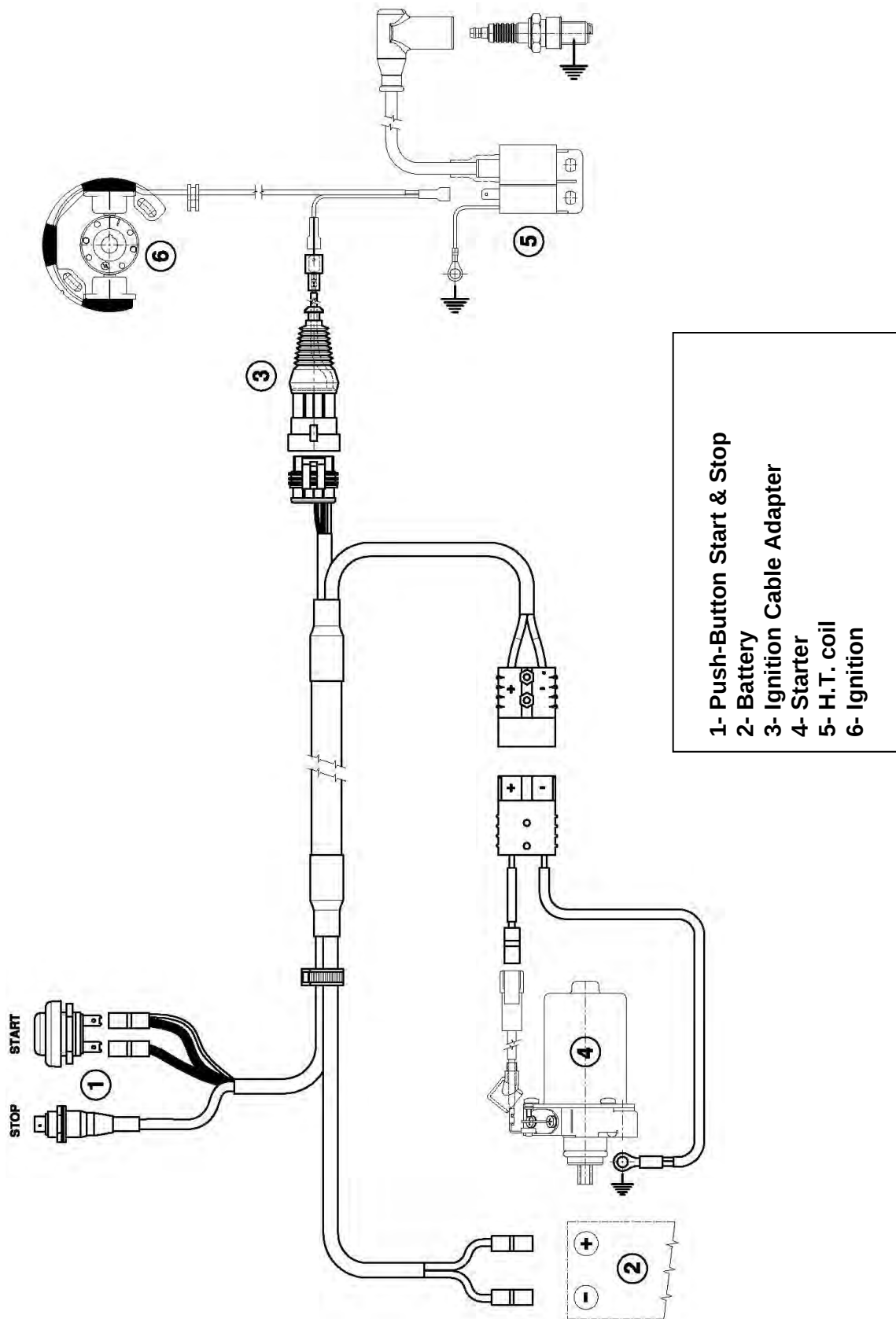
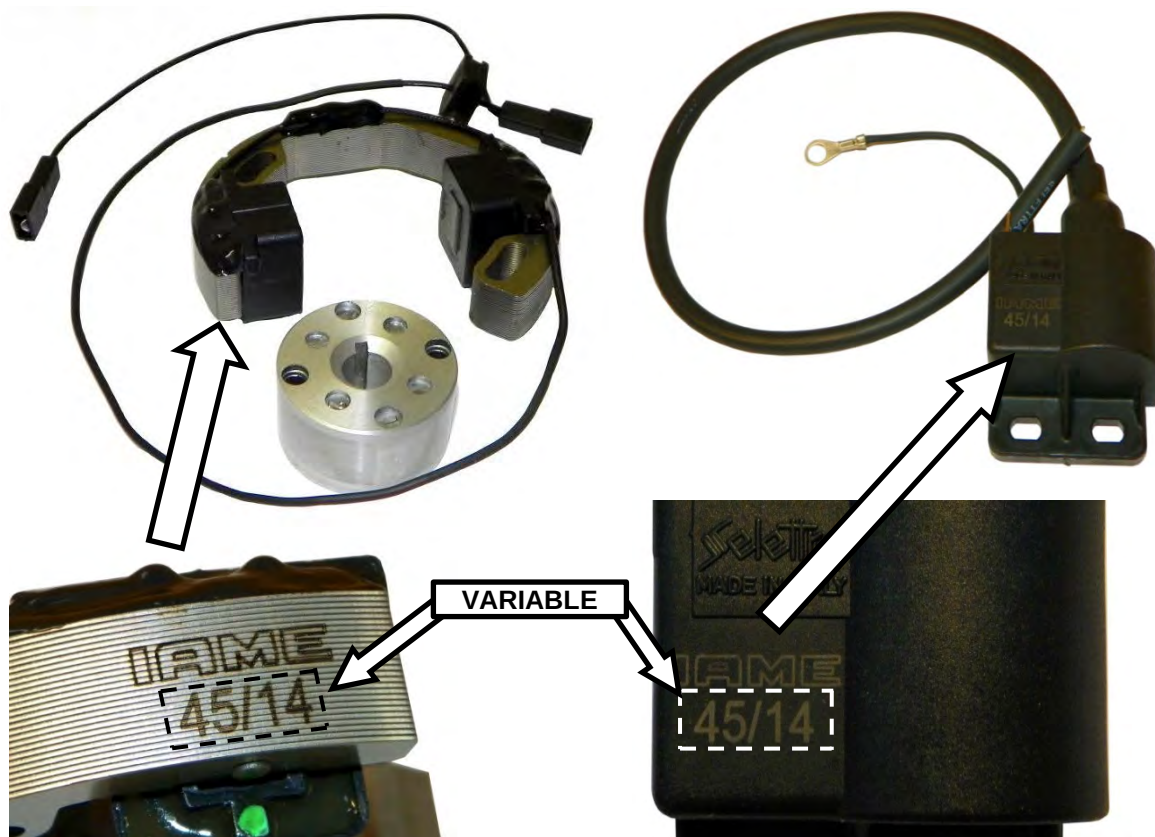


PHOTO COMPLETE WIRING



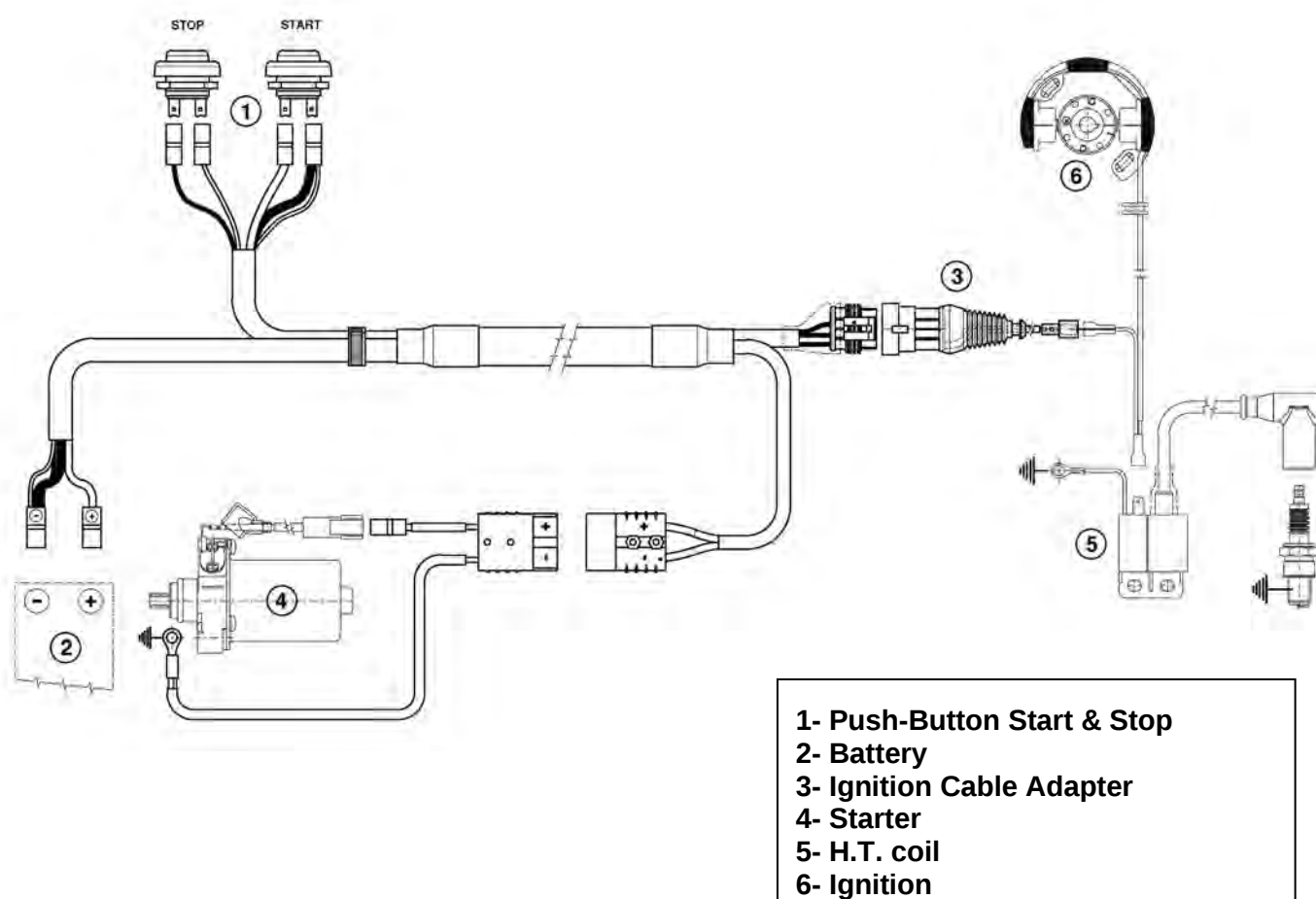
PHOTO OF IGNITION / PHOTO OF H.T. COIL (SELETTA ANALOGUE 2 POLES)



ALTERNATIVE WIRING LOOM



ALTERNATIVE WIRING LOOM DIAGRAM

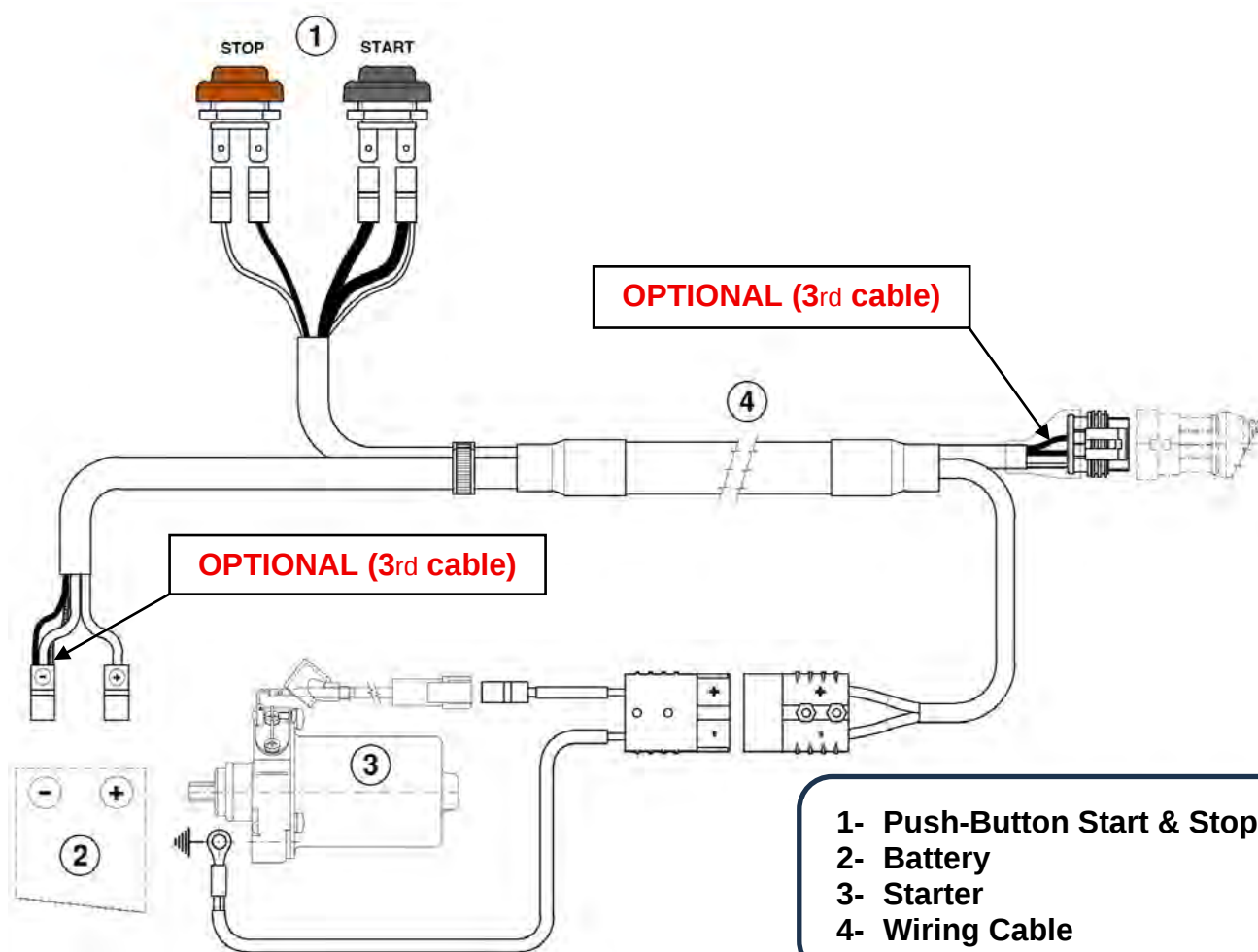


- 1- Push-Button Start & Stop
- 2- Battery
- 3- Ignition Cable Adapter
- 4- Starter
- 5- H.T. coil
- 6- Ignition

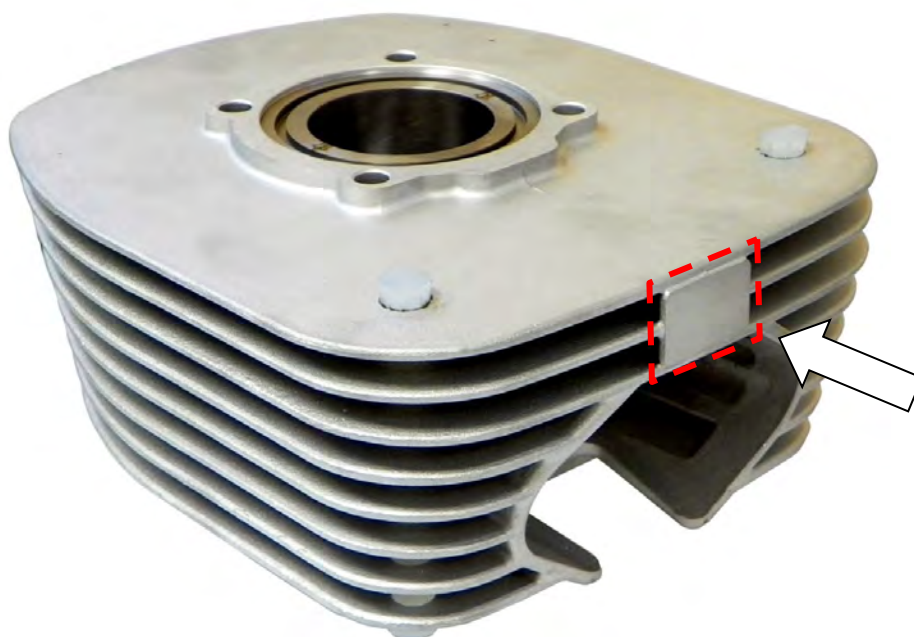
ALTERNATIVE WIRING LOOM



ALTERNATIVE WIRING LOOM DIAGRAM



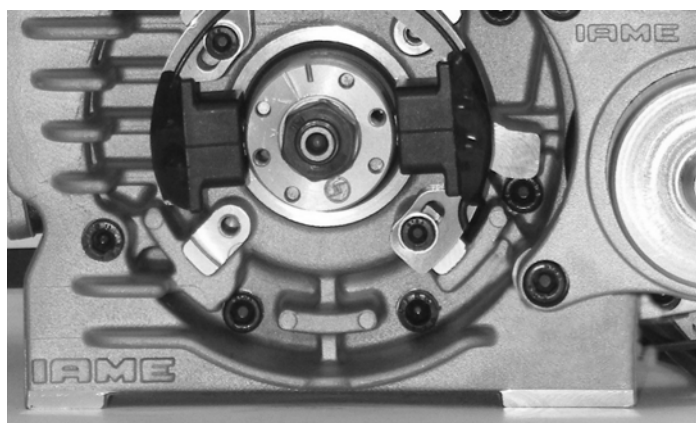
STICKER APPLICATION AREA



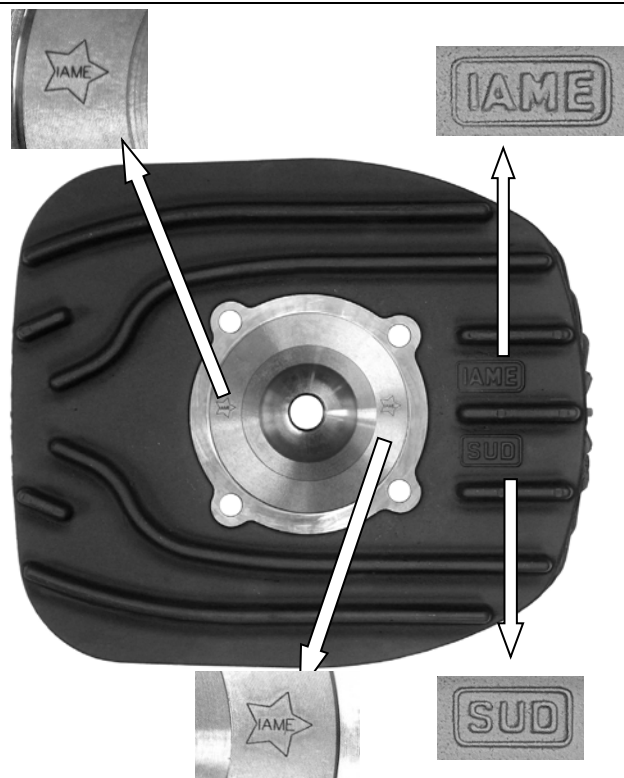
CYLINDER IDENTIFICATION MARKING



CRANKCASE IDENTIFICATION MARKING



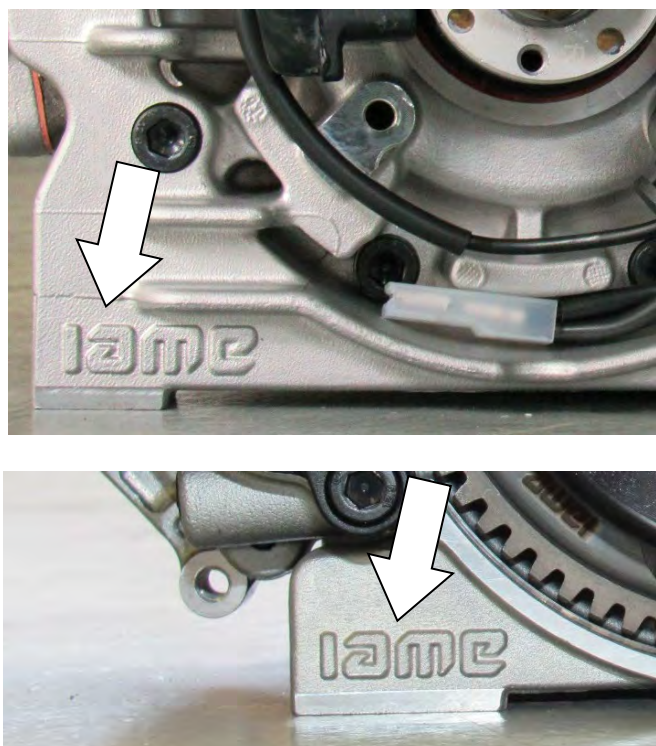
HEAD IDENTIFICATION MARKING



ALTERNATIVE CYLINDER IDENTIFICATION MARKING



ALTERNATIVE CRANKCASE IDENTIFICATION MARKING



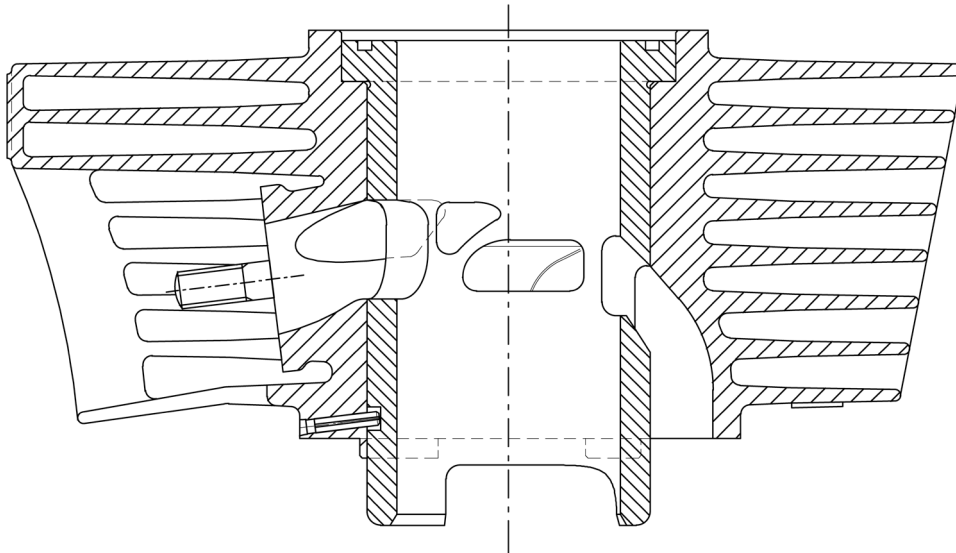
ALTERNATIVE CYLINDER HEAD IDENTIFICATION MARKING



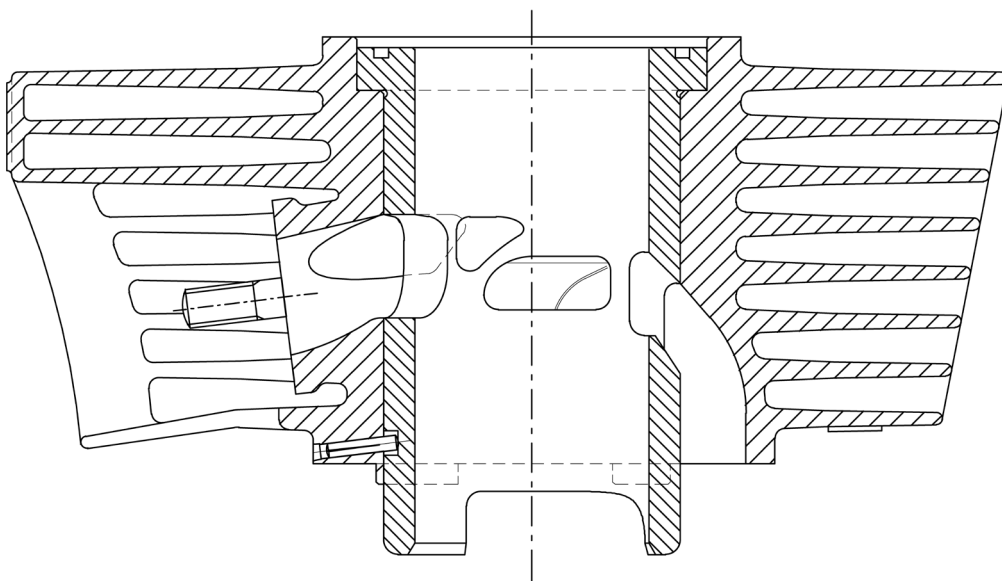
FROM 2025 ON

CYLINDER IDENTIFICATION – ALTERNATIVE CYLINDER LINER LOCK PIN

CURRENT PIN (SPRING PIN)



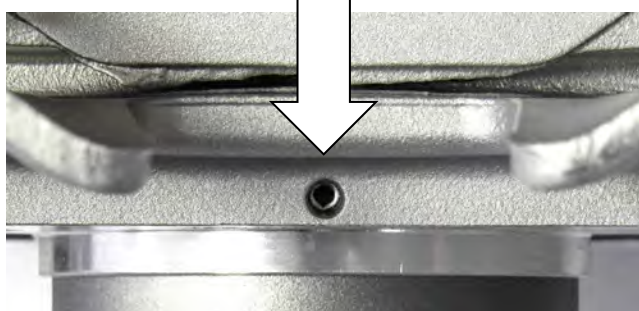
ALTERNATIVE PIN (GROOVED PIN)



FROM 2025 ON

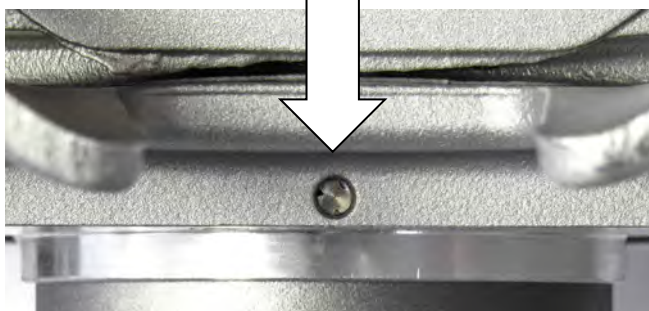
CYLINDER IDENTIFICATION – ALTERNATIVE CYLINDER LINER LOCK PIN

CURRENT PIN



SPRING PIN

ALTERNATIVE PIN

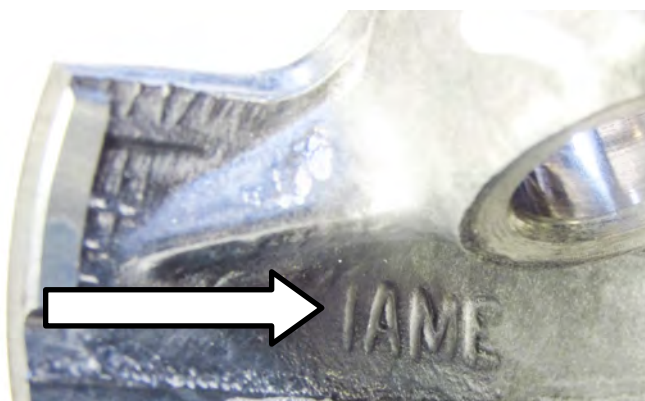
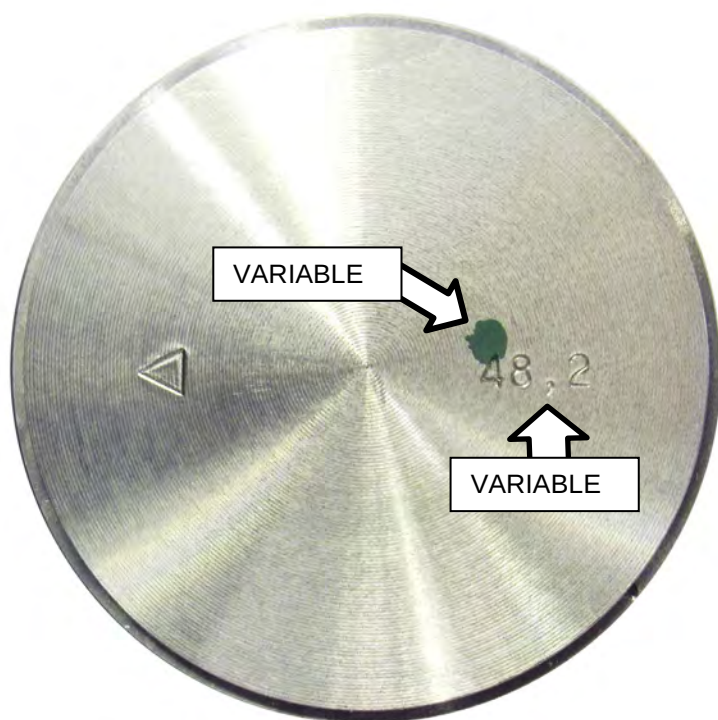


GROOVED PIN

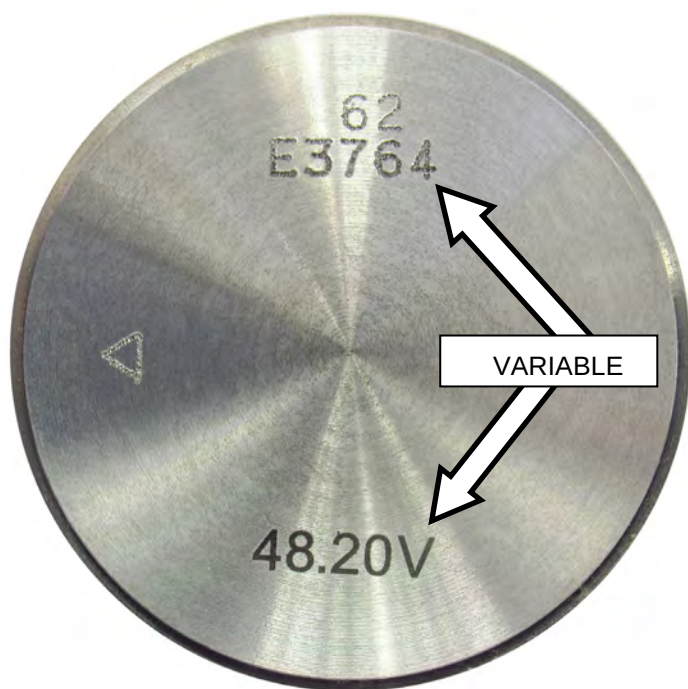
INLET SILENCER - "IAME" IDENTIFICATION MARKING



PISTON IDENTIFICATION MARKING



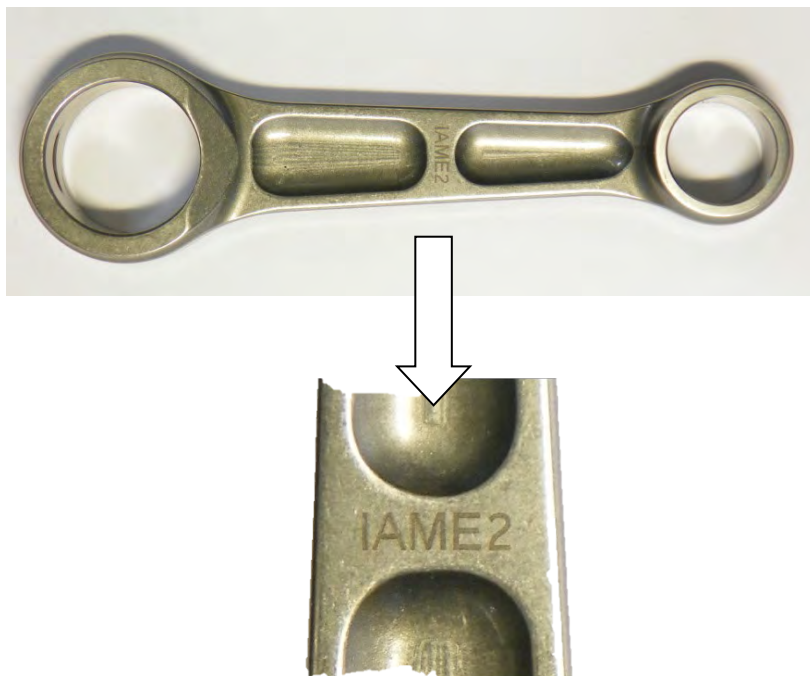
ALTERNATIVE PISTON IDENTIFICATION MARKING



PISTON PHOTO IDENTIFICATION



CONROD PHOTO IDENTIFICATION



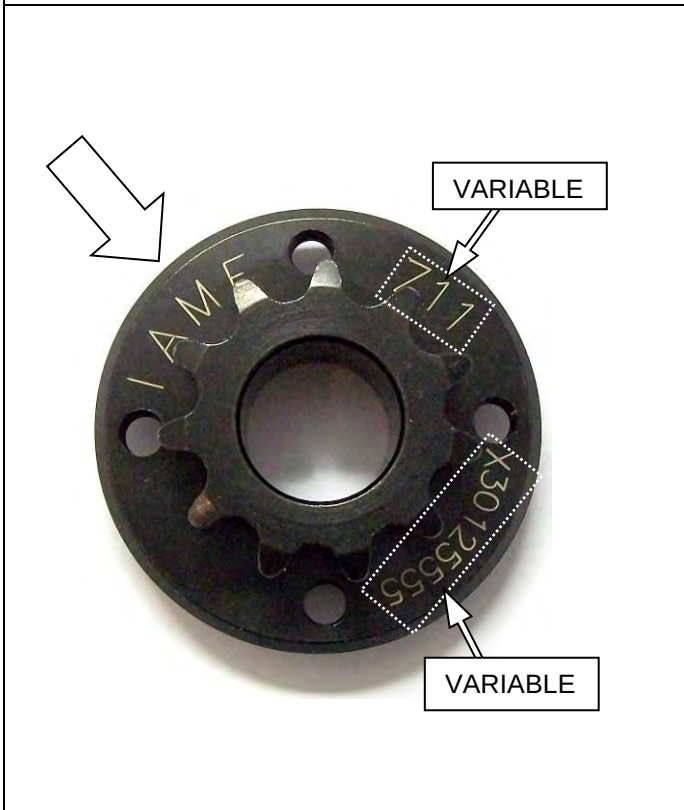
STARTER IDENTIFICATION MARKING



CRANKSHAFT IDENTIFICATION MARKING



SPROCKET IDENTIFICATION MARKING

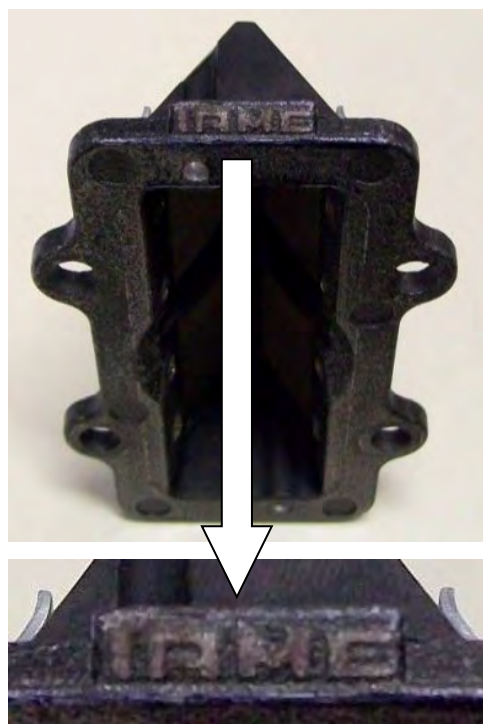


STARTER RING IDENTIFICATION MARKING

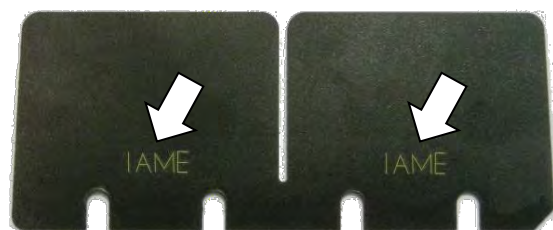


CLUTCH BODY IDENTIFICATION MARKING	CLUTCH DRUM IDENTIFICATION MARKING
 FRICTION MATERIAL  ALTERNATIVE   VARIABLE	 
PHOTO IDENTIFICATION CARBURETOR INLET CONVEYOR	BENDIX COVER IDENTIFICATION MARKING
	  REAR SIDE  FRONT SIDE

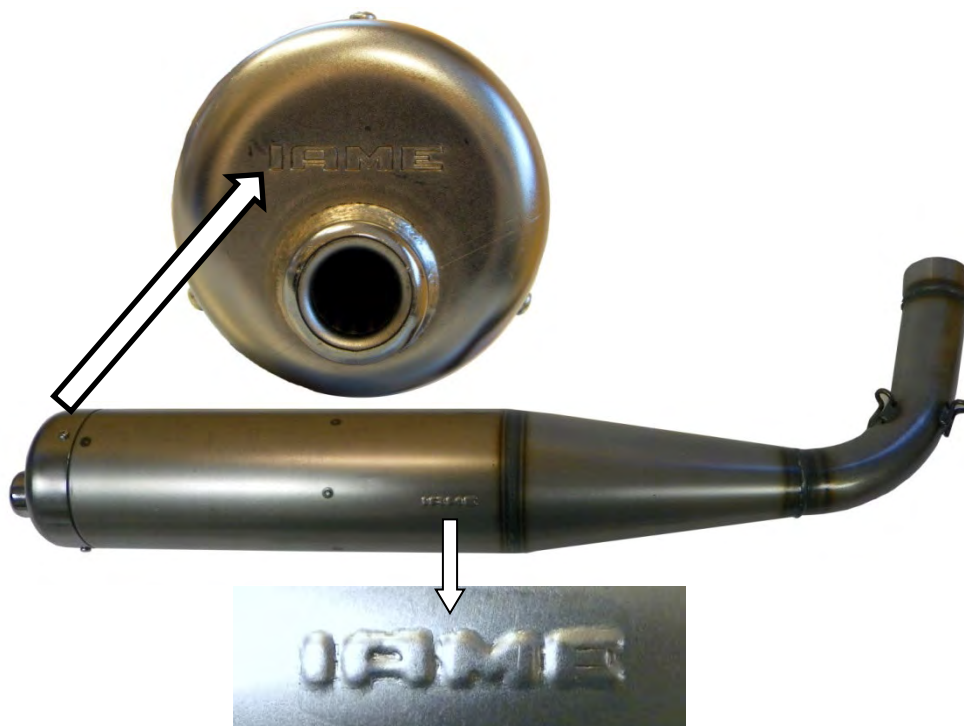
REED GROUP & PETALS IDENTIFICATION MARKING



FIBER GLASS



EXHAUST SILENCER IDENTIFICATION MARKING



CLUTCH COVER - ALTERNATIVE SHAPE AND SURFACE FINISHING

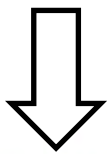


ALTERNATIVE

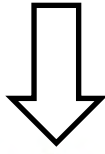


PHOTO IDENTIFICATION REED GROUP

CURRENT VERSION

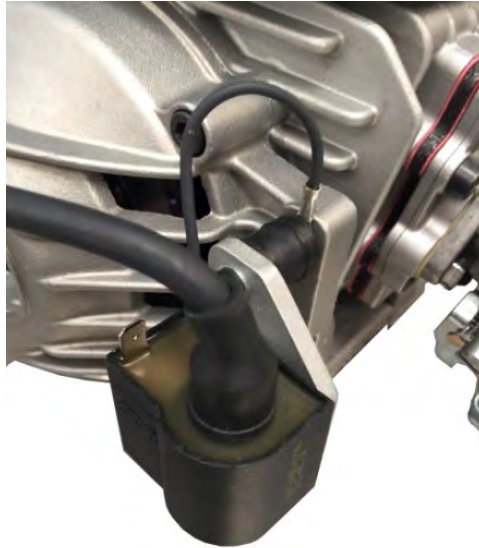


ALTERNATIVE VERSION



ALTERNATIVE INSTALLATION OF GROUND CABLE ON THE CRANKCASE

STANDARD INSTALLATION



ALTERNATIVE INSTALLATION





CARBURETTOR Tillotson HW-33A



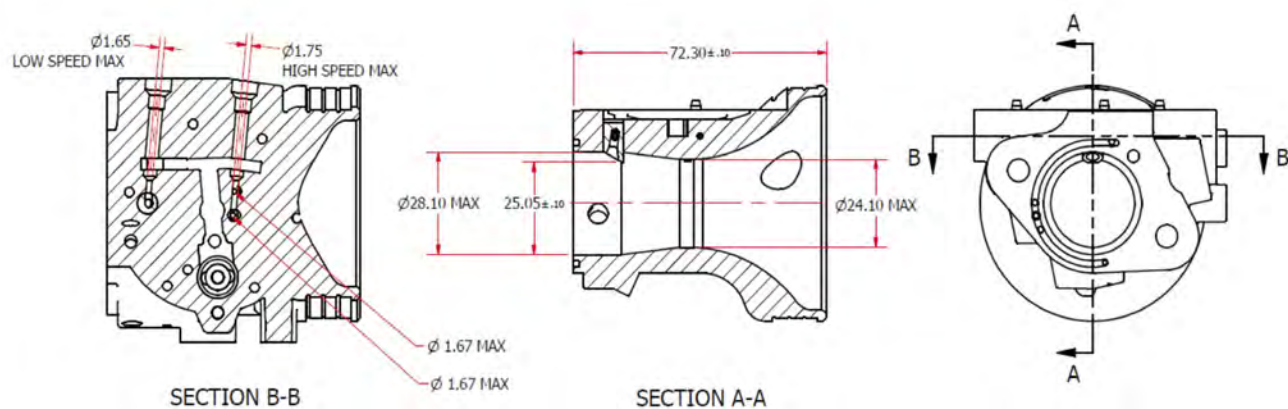
PHOTO OF ADJUSTING SIDE



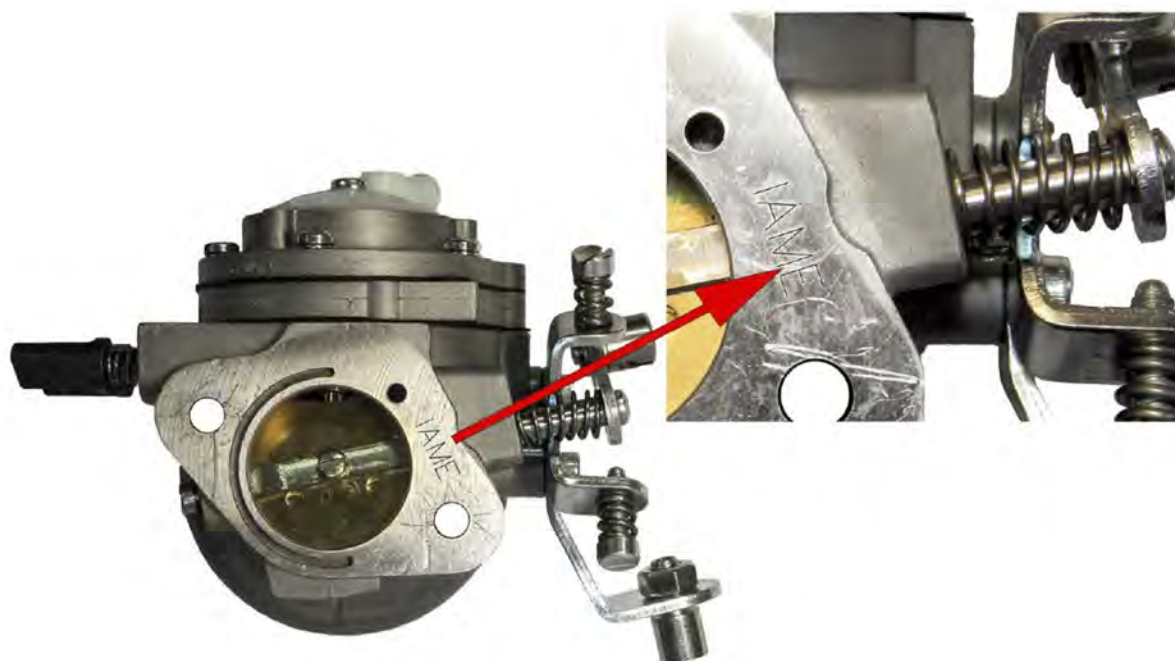
PHOTO OF INLET SIDE

Manufacturer	TILLOTSON LTD.
Make	TILLOTSON
Model	HW-33A

SECTION VIEW

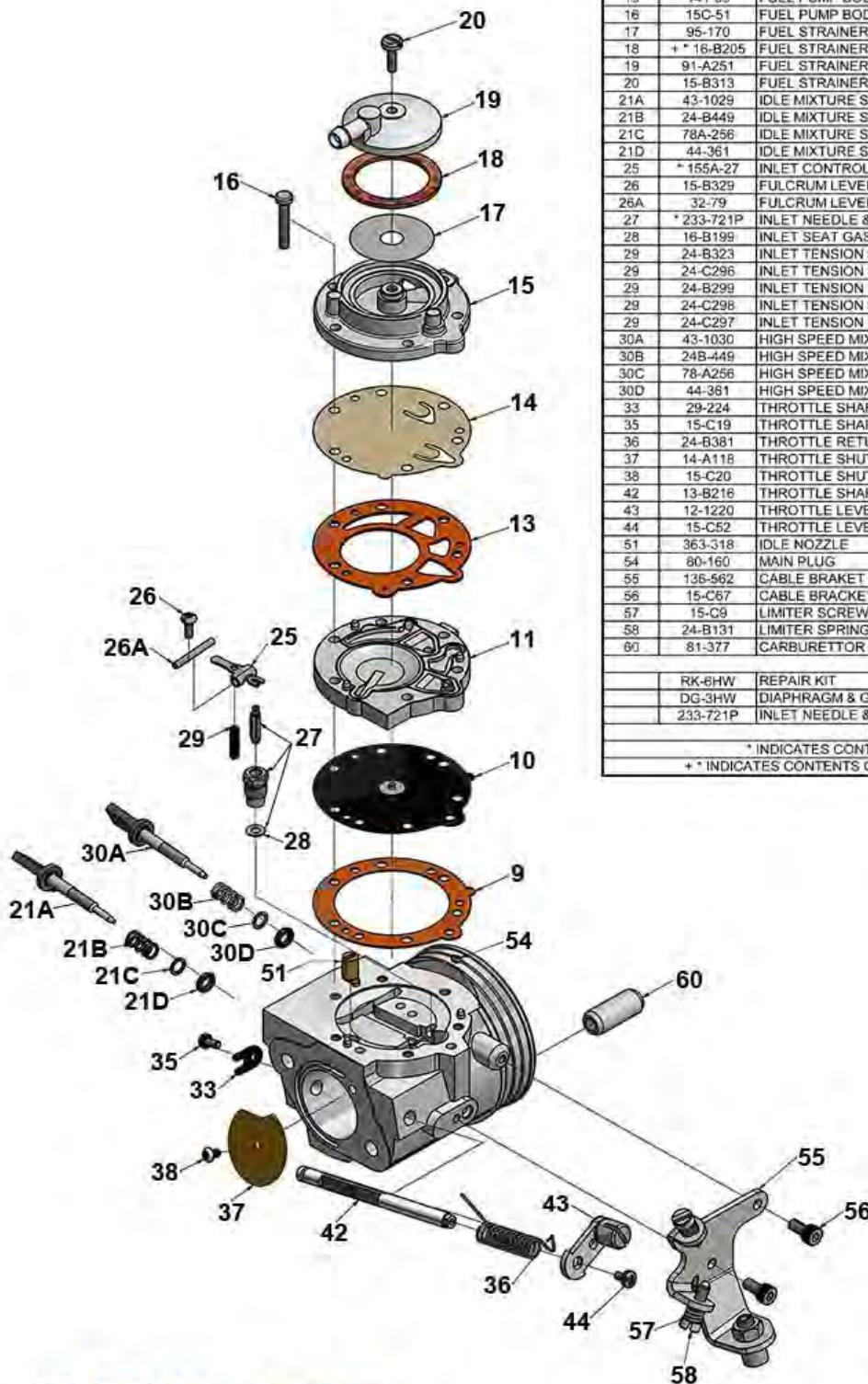


MARKING



CARBURETTOR DESCRIPTION AND SKETCH OF PARTS

HW-33A



HW-33A CARBURETTOR PARTS LIST			
ITEM	PART NO.	DESCRIPTION	QTY
9	* 16-B406	DIAPHRAGM GASKET	1
10	* 237-600	DIAPHRAGM	1
11	91A-275	DIAPHRAGM COVER	1
13	* 16-B407	FUEL PUMP GASKET	1
14	* 237-162	FUEL PUMP DIAPHRAGM	1
15	141-89	FUEL PUMP BODY	1
16	15C-51	FUEL PUMP BODY SCREW	6
17	95-170	FUEL STRAINER SCREEN	1
18	* 16-B205	FUEL STRAINER COVER GASKET	1
19	91-A251	FUEL STRAINER COVER	1
20	15-B313	FUEL STRAINER COVER RETAINING SCREW	1
21A	43-1029	IDLE MIXTURE SCREW	1
21B	24-B449	IDLE MIXTURE SCREW SPRING	1
21C	78A-256	IDLE MIXTURE SCREW WASHER	1
21D	44-361	IDLE MIXTURE SCREW PACKING	1
25	* 155A-27	INLET CONTROL LEVER	1
26	15-B329	FULCRUM LEVER SCREW	1
26A	32-79	FULCRUM LEVER PIN	1
27	* 233-721P	INLET NEEDLE & SEAT SET	1
28	16-B199	INLET SEAT GASKET	1
29	24-B323	INLET TENSION SPRING 26G	OPTION
29	24-C296	INLET TENSION SPRING 31G	OPTION
29	24-B299	INLET TENSION SPRING 37G	1
29	24-C298	INLET TENSION SPRING 42G	OPTION
29	24-C297	INLET TENSION SPRING 46G	OPTION
30A	43-1030	HIGH SPEED MIXTURE SCREW	1
30B	24B-449	HIGH SPEED MIXTURE SCREW SPRING	1
30C	78-A256	HIGH SPEED MIXTURE SCREW WASHER	1
30D	44-361	HIGH SPEED MIXTURE SCREW PACKING	1
33	29-224	THROTTLE SHAFT CLIP	1
35	15-C19	THROTTLE SHAFT CLIP RETAINING SCREW	1
36	24-B381	THROTTLE RETURN SPRING	1
37	14-A118	THROTTLE SHUTTER	1
38	15-C20	THROTTLE SHUTTER SCREW	1
42	13-B216	THROTTLE SHAFT	1
43	12-1220	THROTTLE LEVER ASSEMBLY	1
44	15-C52	THROTTLE LEVER RETAINING SCREW	1
51	363-318	IDLE NOZZLE	1
54	80-160	MAIN PLUG	2
55	136-562	CABLE BRACKET	1
56	15-C67	CABLE BRACKET RETAINING SCREW	2
57	15-C9	LIMITER SCREW	2
58	24-B131	LIMITER SPRING	2
60	81-377	CARBURETTOR MOUNTING NUT	2
RK-6HW		REPAIR KIT	
DG-3HW		DIAPHRAGM & GASKET	
233-721P		INLET NEEDLE & SEAT SET	
* INDICATES CONTENTS OF REPAIR KIT			
+ * INDICATES CONTENTS OF DIAPHRAGM & GASKET SET			

Tillotson
RACING

Clash Industrial Estate - Tralee - Ireland
www.tillotson-racing.com

PARTS OF CARBURETTOR

REF.9 - P. N°16-B406
DIAPHRAGM GASKET (ORANGE COLOR)



Thickness = 0.5 ± 0.1 mm

REF.13 - P. N° 16-B407
PUMP DIAPHRAGM 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°237-162
PUMP DIAPHRAGM



Thickness = 0.10 ± 0.063 mm

REF.11 - P. N° 91-A275
DIAPHRAGM COVER



Thickness = 6.75 ± 0.15 mm

REF.15 - P. N° 141-89
PUMP COVER



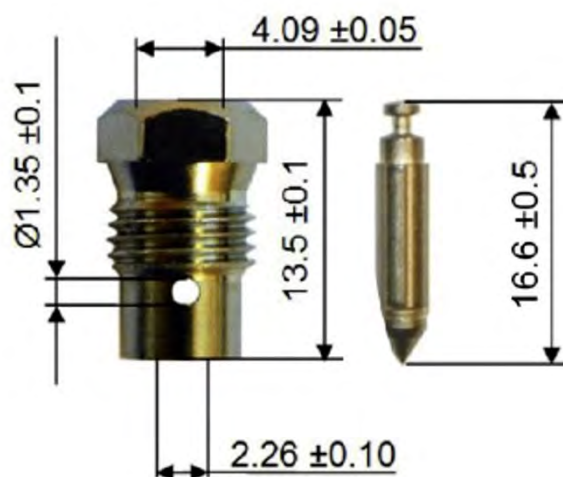
Thickness = 12.5 ± 0.15 mm

REF.37 - P. N° 14-A118
THROTTLE SHUTTER

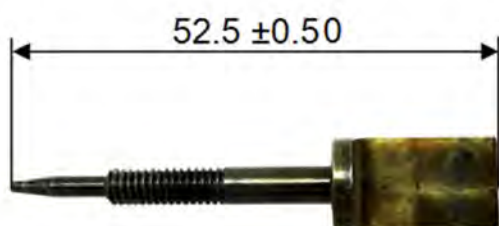


Thickness = 0.84 ±0.1 mm

REF.27 - P. N° 233-721P
SEAT + NEEDLE



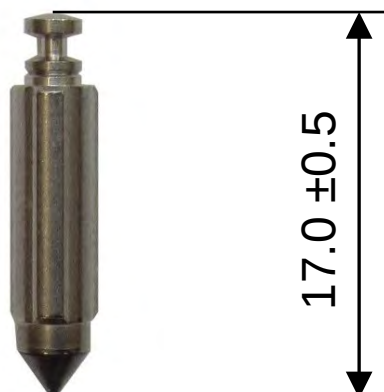
REF.21A - P. N° 43-1029
NEEDLE LOW SPEED



REF.30A - P. N° 43-1030
NEEDLE HIGH SPEED

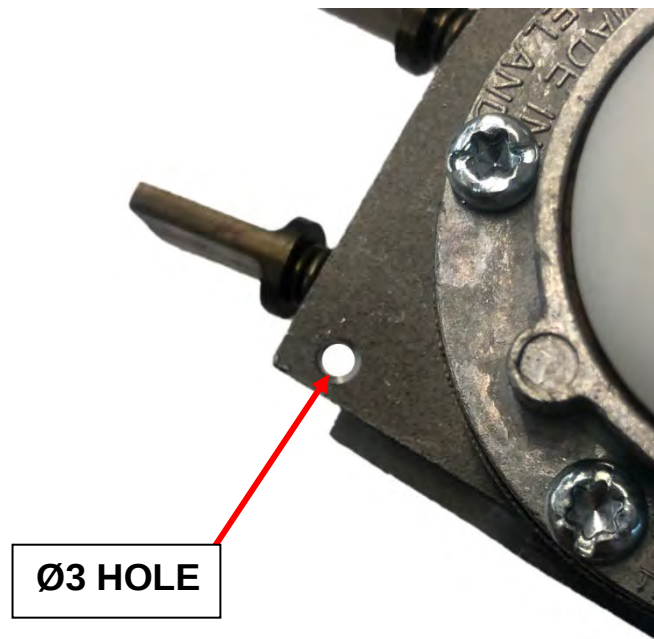


ALTERNATIVE FUEL NEEDLE

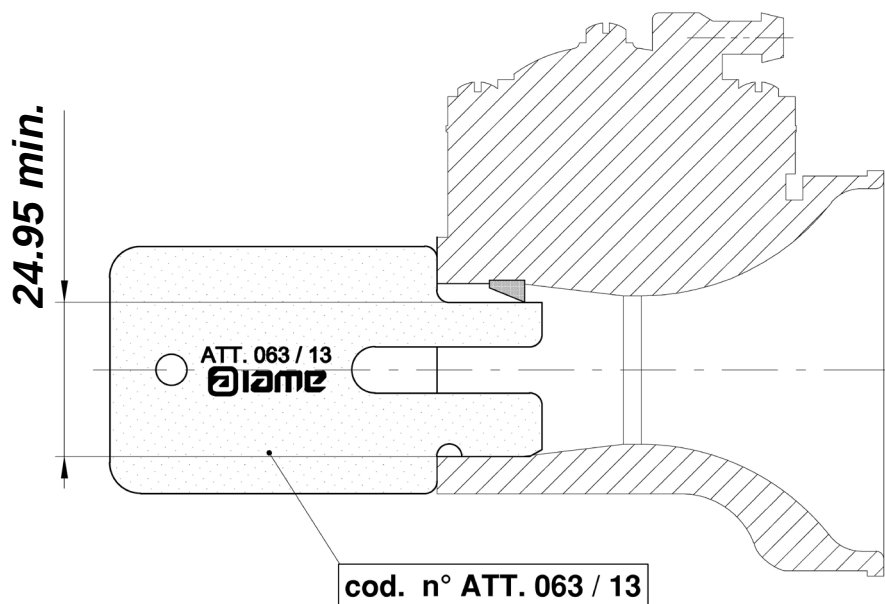


HOLE FOR CARBURETTOR SEALING

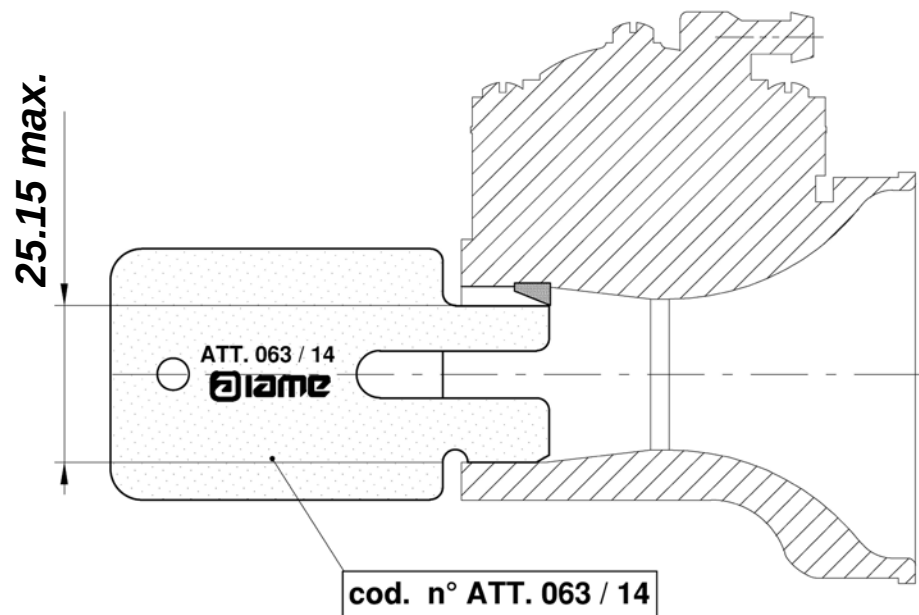
The carburettor can have this hole for sealing



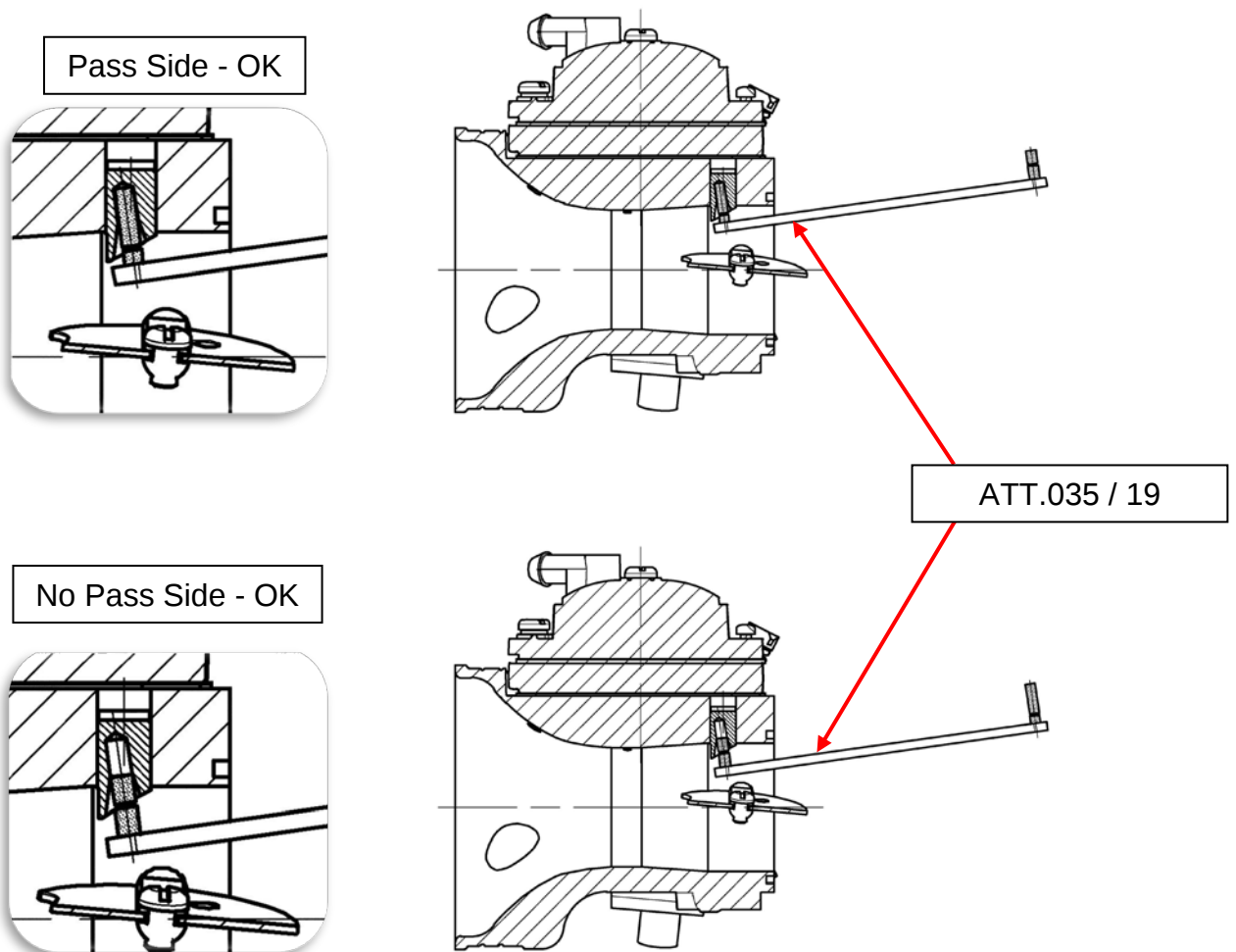
ATOMIZER – HEIGHT MINIMUM AND CHECKING TOOL



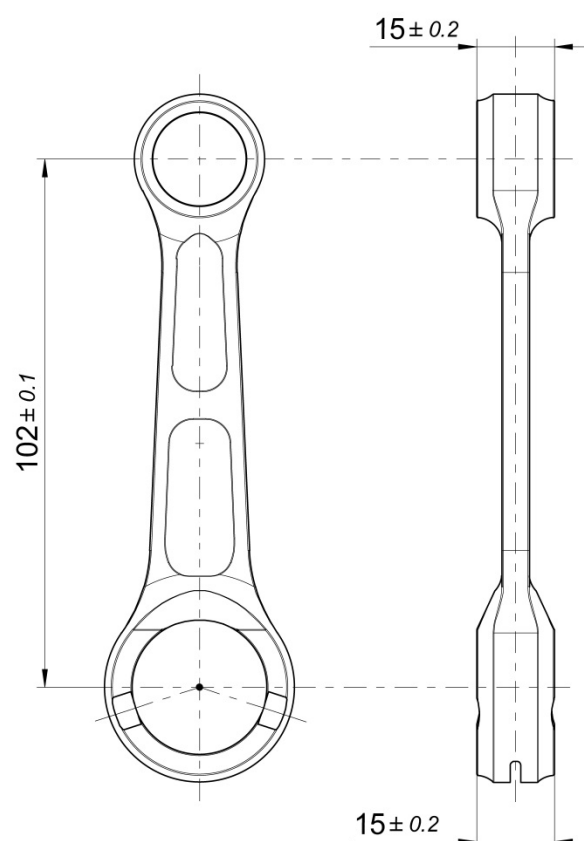
ATOMIZER – HEIGHT MAXIMUM AND CHECKING TOOL



ATOMIZER - CHECKING HOLE DIMENSIONS TOOL



ALTERNATIVE CONROD



BOTH TYPES OF CONROD CAN BE USED WITH BOTH TYPES OF WASHERS
(IN COUPLE)

PHOTO OF THE CONROD BOTH SIDE – ALTERNATIVE

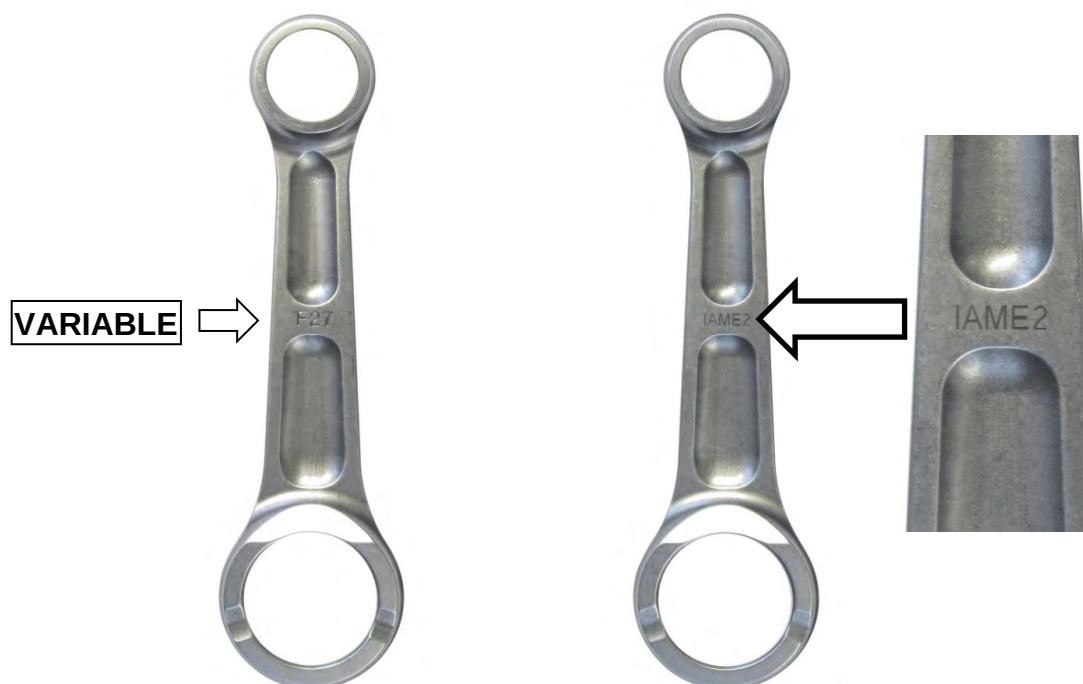


PHOTO IDENTIFICATION OF SMALL END CONROD BEARING – TYPES ALTERNATIVE

TYPE 1



TYPE 2



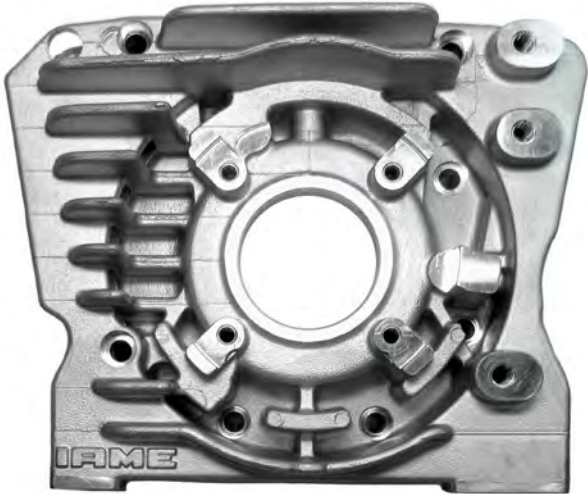
PHOTO IDENTIFICATION OF SILVER CONROD WASHER – TYPES ALTERNATIVE

TYPE 1



TYPE 2



PARTICULARS WITH ALTERNATIVE NEW LOGO "IAME"	
CYLINDER HEAD	CYLINDER
 NEW LOGO 	 NEW LOGO 
SEMICARTER TRANSMISSION SIDE	SEMICARTER IGNITION SIDE
 NEW LOGO 	 NEW LOGO 

PARTICULARS WITH ALTERNATIVE NEW LOGO "IAME"	
STARTER SUPPORT	CLUTCH COVER
 NEW LOGO 	 NEW LOGO 
REED GROUP	CARBURETTOR INLET CONVEYOR
 NEW LOGO 	 NEW LOGO 

PARTICULARS WITH ALTERNATIVE NEW LOGO "IAME"

EXHAUST



NEW LOGO



NEW LOGO



INLET SILENCER



NEW LOGO



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"

I a m e

or

Q I a m e

or

