RE-HOMOLOGATED 31-1-2019

106H - RH

ENGINE

Manufacturer	**IAME SPA**
Make	**IAME**
Model	**KA100 - 100cc REEDJET AUS – TaG**
Validity of the homologation	**6 years**
Number of pages	**56**
Most Recent Update	**1 January 2024**

This Homologation Form reproduces descriptions, illustrations and dimensions of the engine at the time that Karting Australia conducted the homologation.

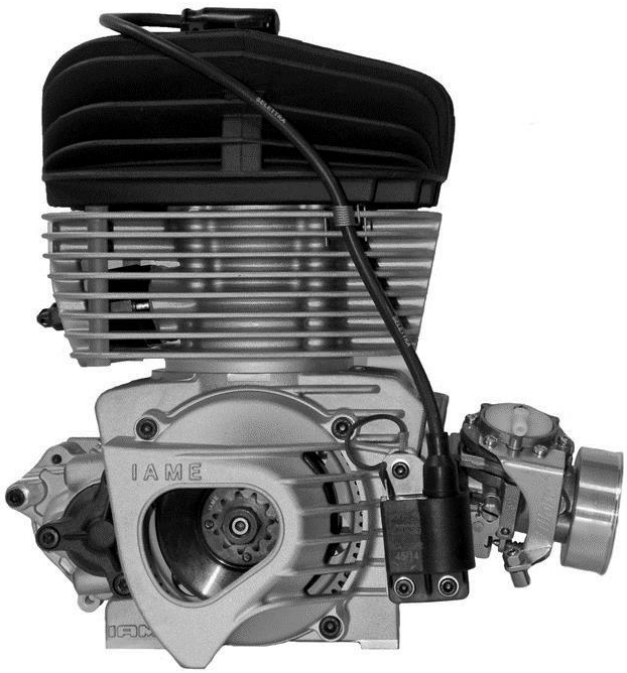


PHOTO OF DRIVE SIDE OF ENGINE

PHOTO OF OPPOSITE SIDE OF ENGINE

Signature and Stamp of Karting Australia

Ashley Woolner
National Technical Commissioner
2019

Shaune English
National Technical Commissioner
2023

Re-homologated & Updated
31 January 2019

Further Updated
20 October 2020
14 December 2021
24 February 2022
17 January 2023
1 January 2024

First Homologated
16 December 2014

100cc REEDJET AUS – TaG

FEATURES	
Cylinder Volume	100 cm³ max
Bore	48.20 mm
Max. theoretical bore	48.53 mm
Stroke	54.05 mm max
Cooling system	Air
Inlet system	Reed valve
Number of carbs	1

Tillotson Carburettor	HW-33A HL-398A	Cylinder / crankcase transfers n°	3 / 3
Number of piston rings	1	Transfers / exhaust ports number	3 / 3
Big end conr. ball-bearing diam.	20x26x15	Combustion chamber shape	Spherical
Crankshaft ball-bearing diam.	25x52x15	Selettra ignition (adjustable)	Analogue 2 Poles
Small end conr. ball-bearing diam.	14x18x18	Distance between Conrod centres	102 mm

PHOTO OF DRIVE SIDE OF THE COMPLETE ENGINE

PHOTO OF OPPOSITE DRIVE SIDE OF THE COMPLETE ENGINE

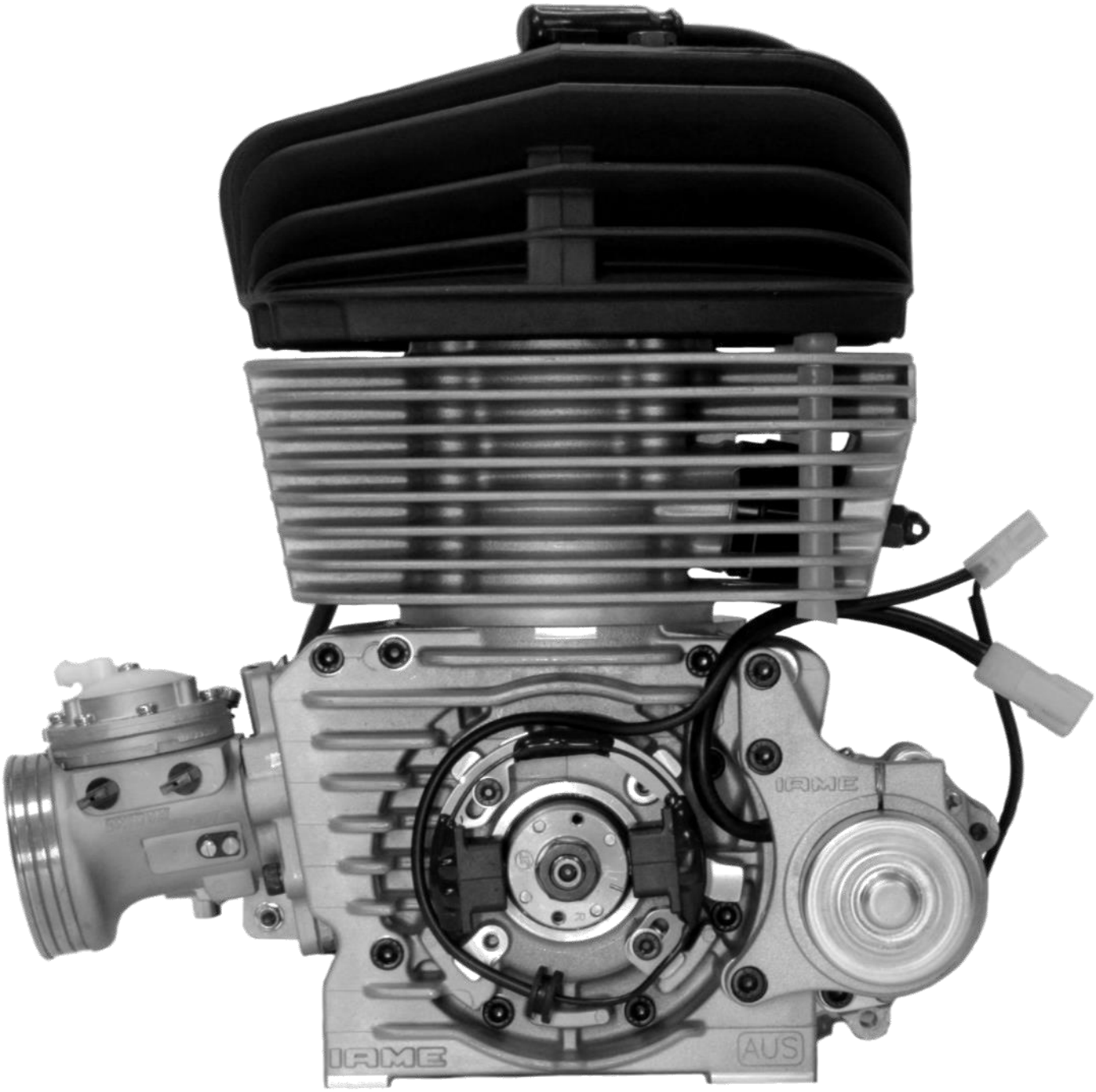


PHOTO OF THE REAR OF THE COMPLETE ENGINE

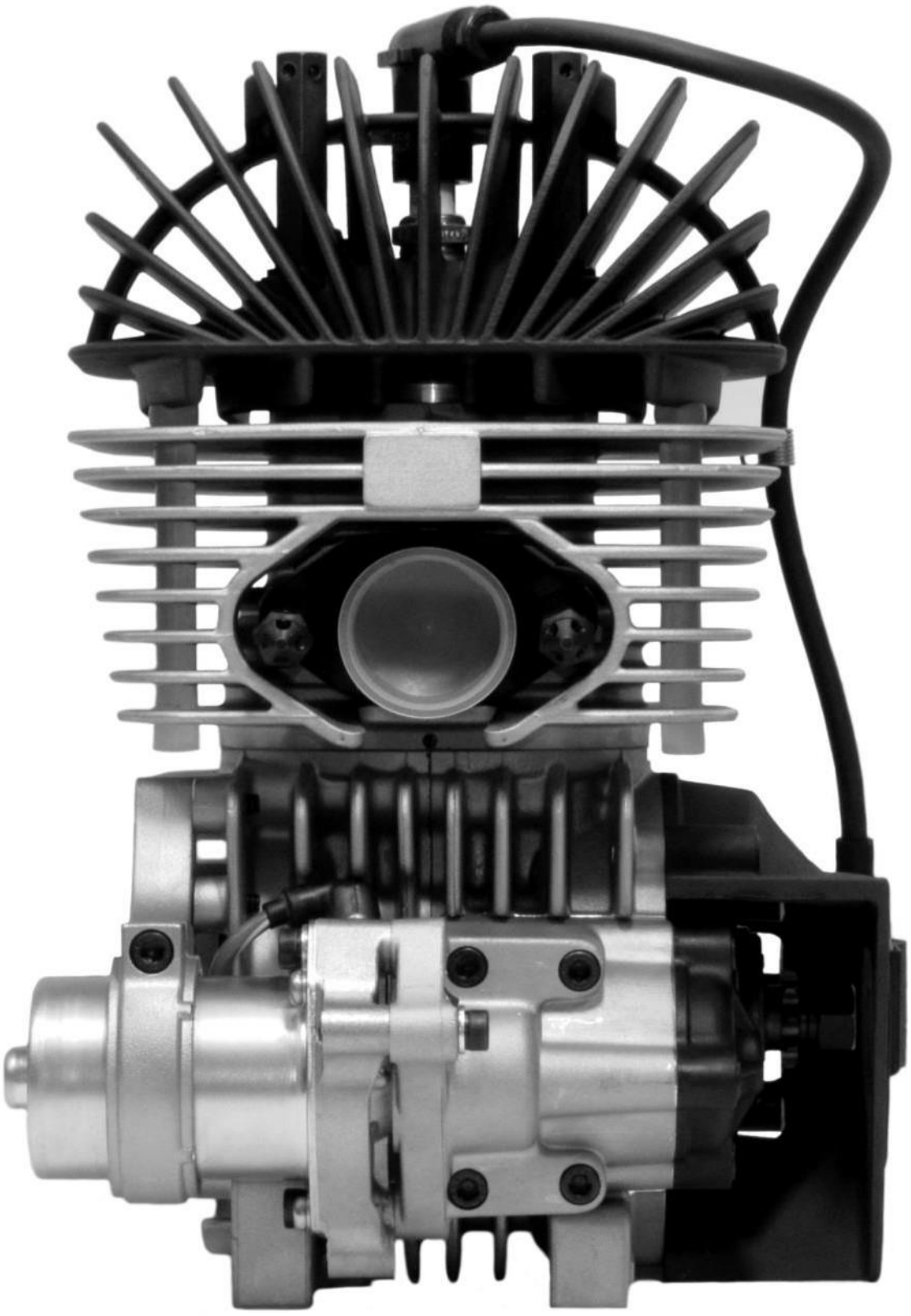


PHOTO OF THE FRONT OF THE COMPLETE ENGINE

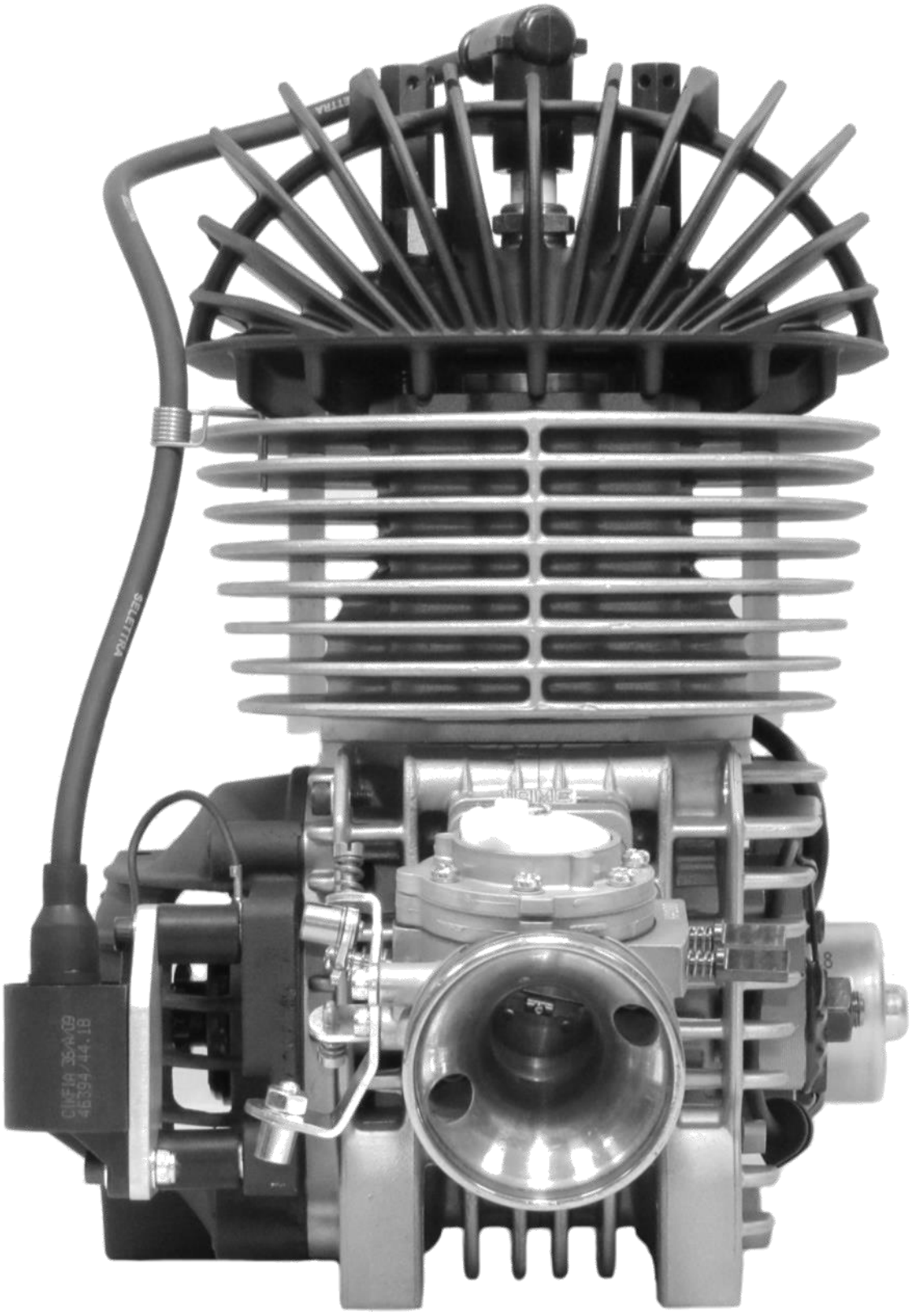
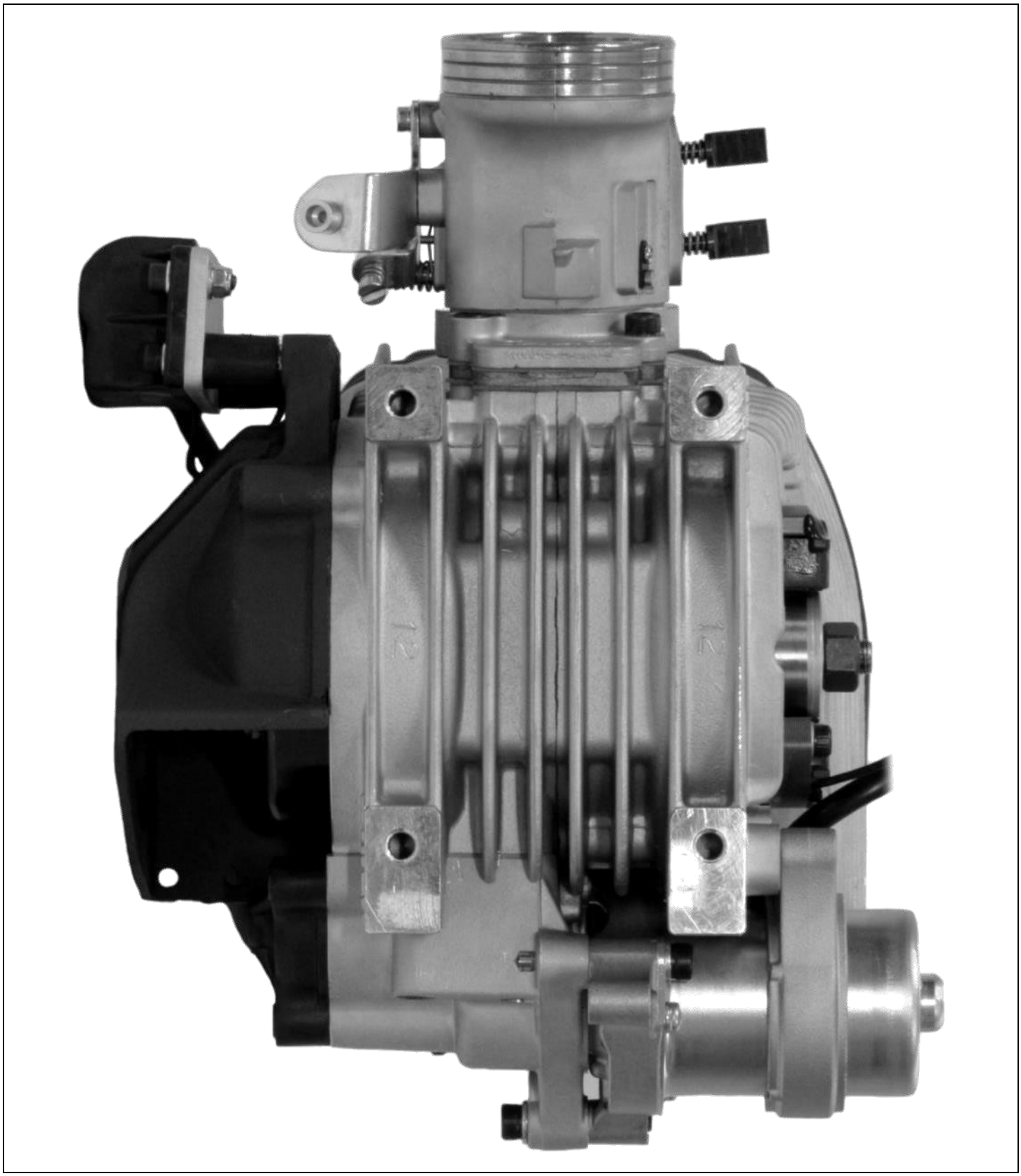


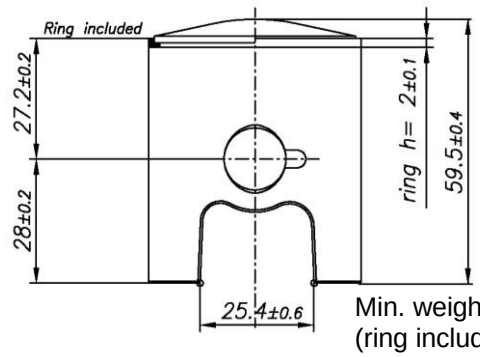
PHOTO OF THE COMPLETE ENGINE TAKEN FROM ABOVE

PHOTO OF THE COMPLETE ENGINE TAKEN FROM BELOW



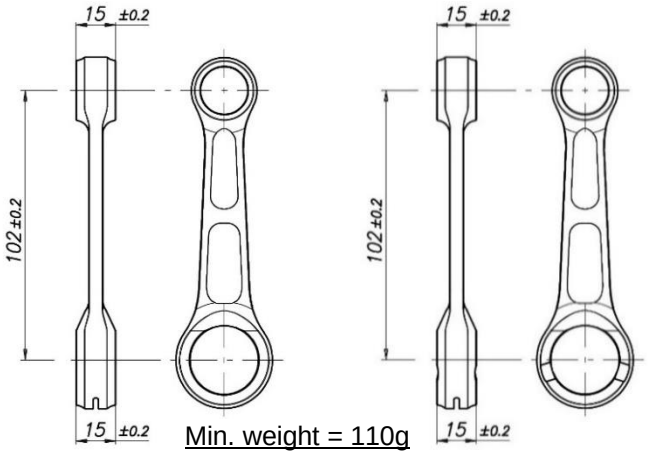
DESCRIPTION OF THE MATERIAL	
Conrod material	Steel
Crankshaft material	Steel
Head material	Aluminium
Cylinder material	Aluminium
Liner material	Cast Iron
Crankcase material	Aluminium
Piston material	Aluminium
Piston rings material	Cast Iron
Exhaust muffler material	Sheet-steel
Bearings	6205 type or BC1-1442 D

PISTON



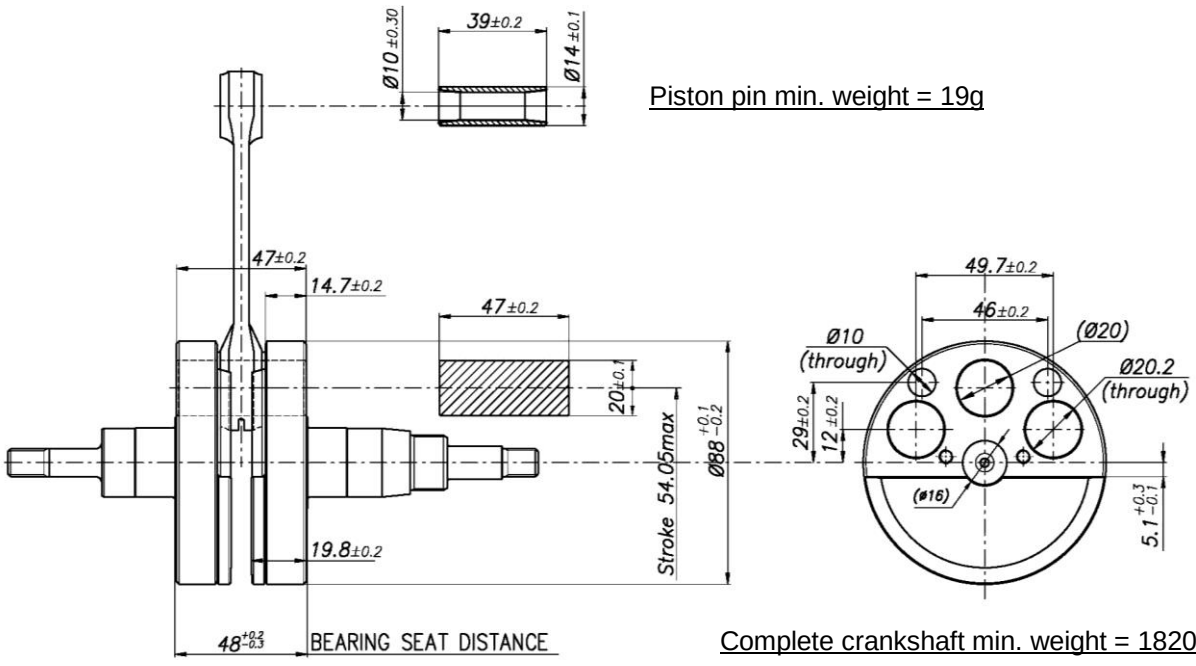
Min. weight (ring included) = 95g

DISTANCE BETWEEN CONROD CENTERS



Min. weight = 110g

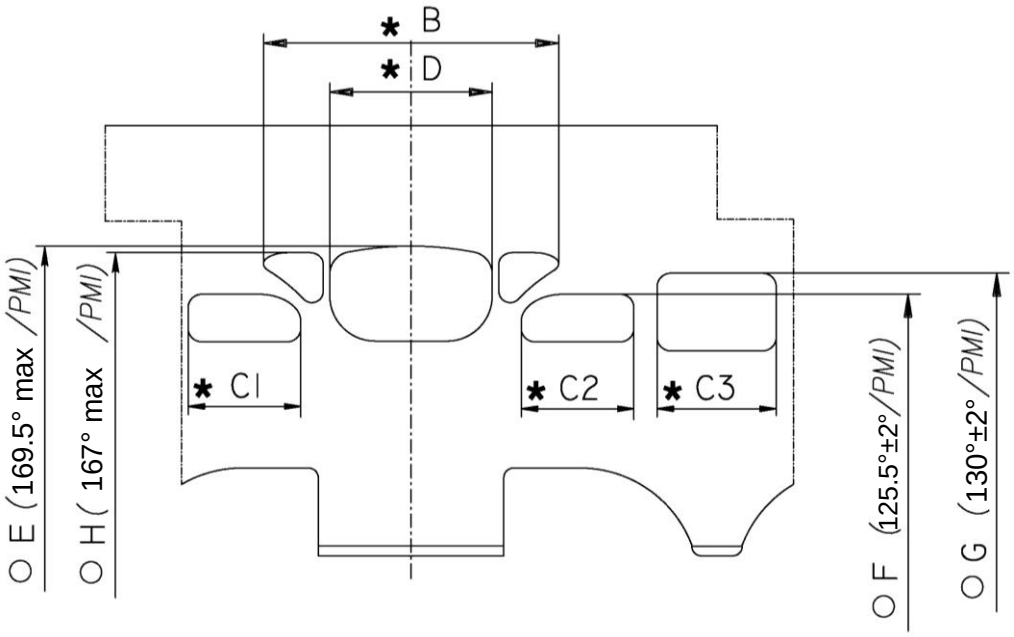
CRANKSHAFT



Piston pin min. weight = 19g

Complete crankshaft min. weight = 1820g

CYLINDER DEVELOPMENT

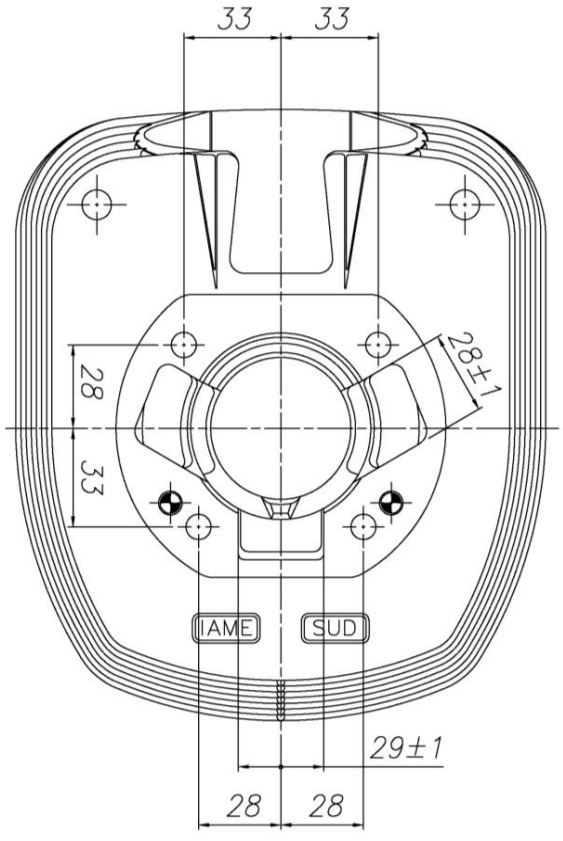


B	≤ 48.2 mm
C1 = C2	≤ 27.2 mm
C3	≤ 27 mm
D	≤ 34 mm
E	169.5° max
F	125.5° ±2°
G	130° ±2°
H	167° max

* *CHORDAL READING*

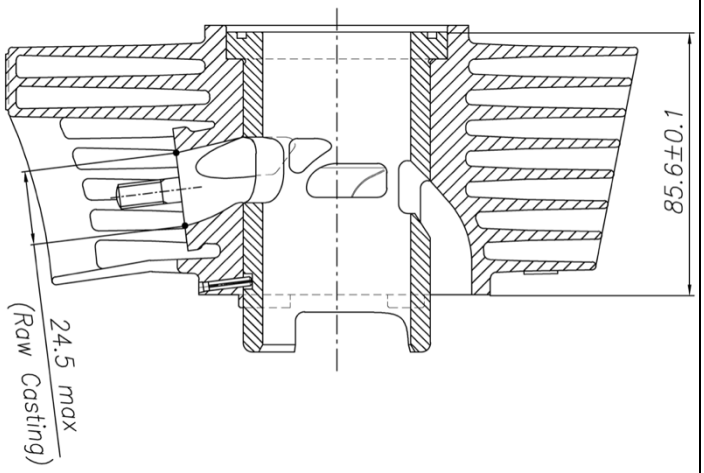
O *ANGULAR READING BY INSERTING A 0.2x5 mm GAUGE*

CYLINDER BASE VIEW



CYLINDER CROSS SECTION VIEW

The cylinder liner height is reduced from 85.6 ±0.2 to 85.6 ±0.1

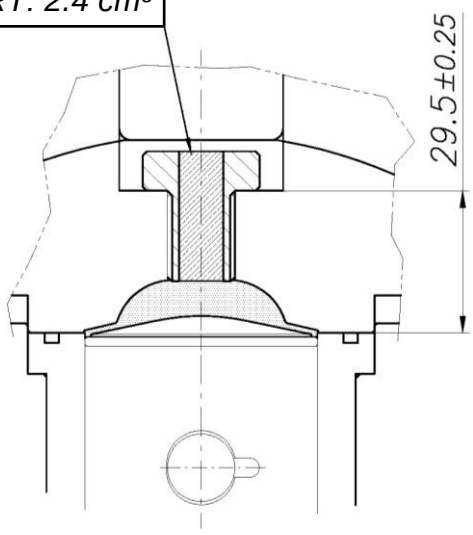


RE-HOMOLOGATED 31-1-2019

106H - RH

COMBUSTION CHAMBER VIEW

INSERT: 2.4 cm³

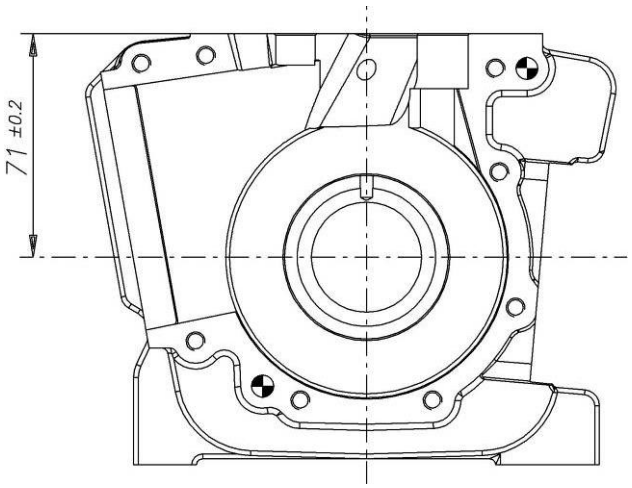


COMBUSTION CHAMBER VOLUME = 9.2 cm³ min.

SQUISH MIN.= 1.05 mm
(measured with Ø2mm TIN)

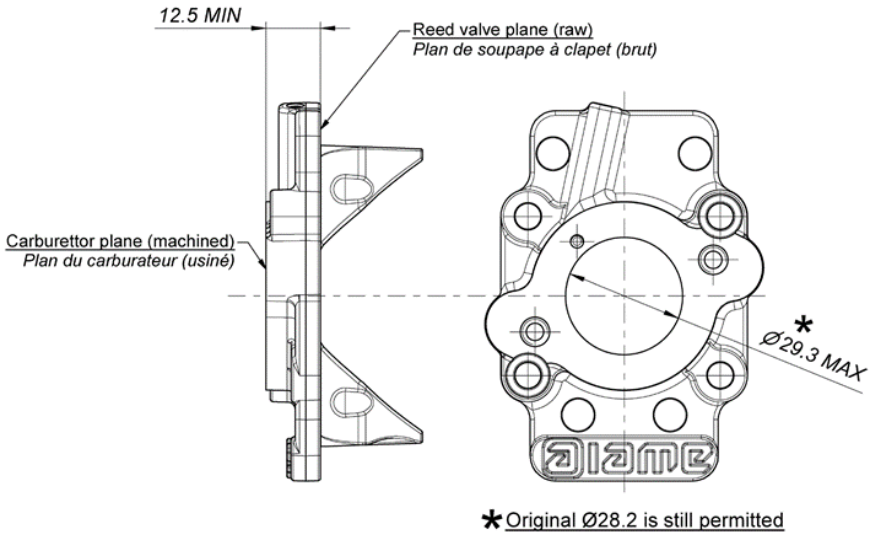
Combustion chamber volume in the cylinder head
(with Volumeter and Insert):
11.3 cm³ min

CRANKCASE INSIDE VIEW



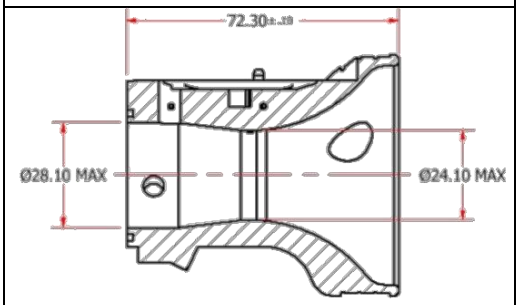
INLET CONVEYOR DIMENSIONS

New drawings. Inlet Conveyor thickness specified as 12.5 Min.

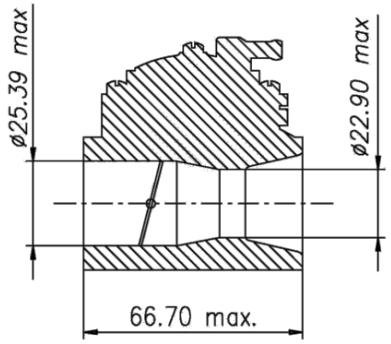


VENTURI CARB. DIMENSIONS

TILLOTSON HW-33A



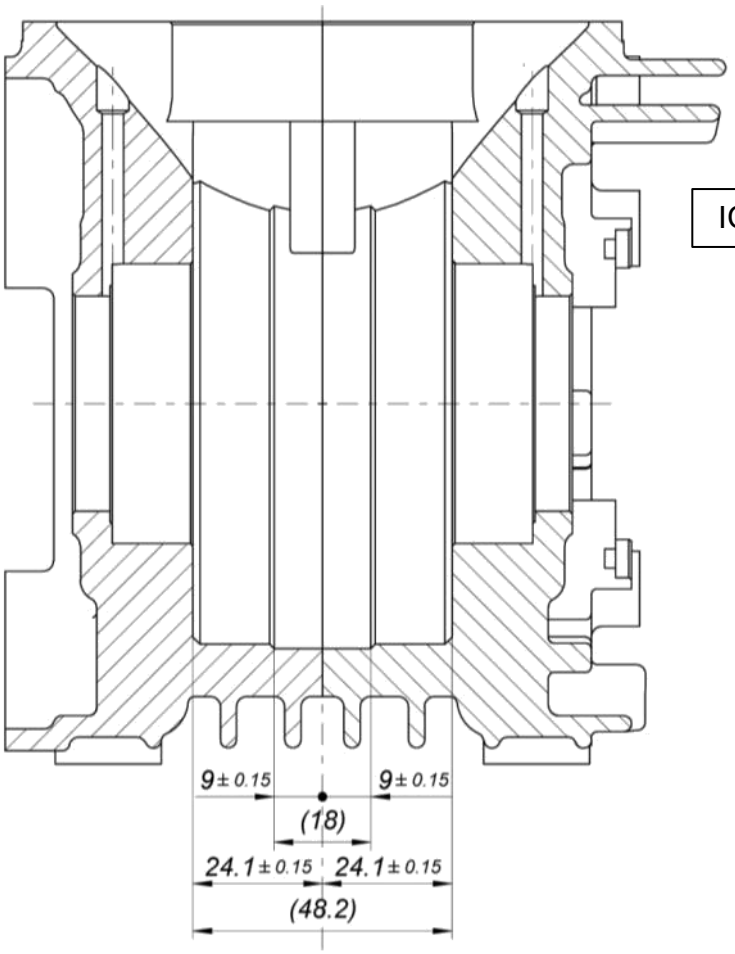
TILLOTSON HL-398A



CRANKCASE WIDTH DIMENSIONS

DRIVE SIDE

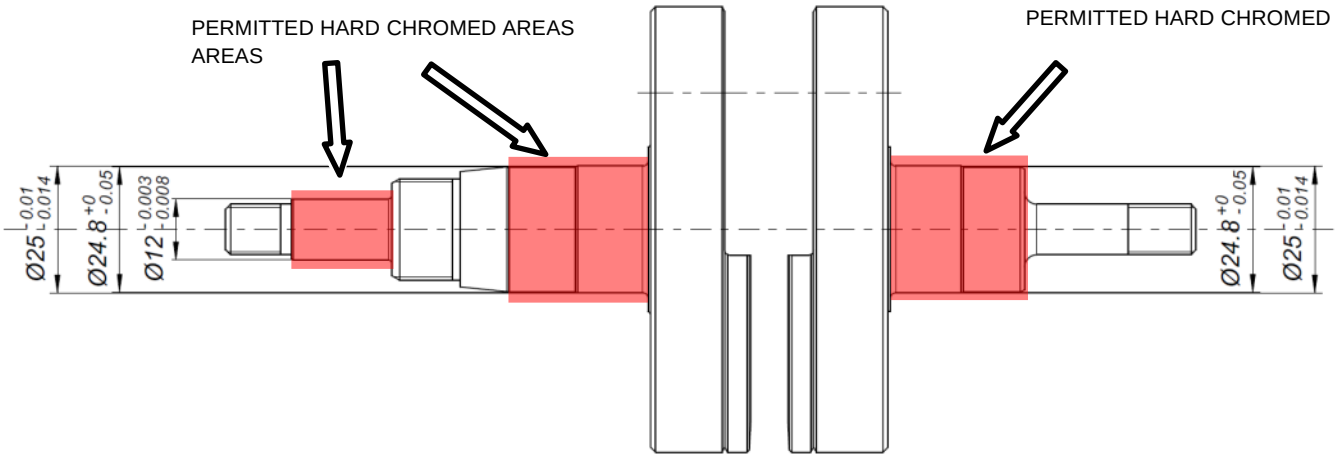
IGNITION SIDE



CRANKSHAFT REPAIR BY HARD CHROMING

DRIVE SIDE

IGNITION SIDE



BEARING SHIMS IN OPTIONAL

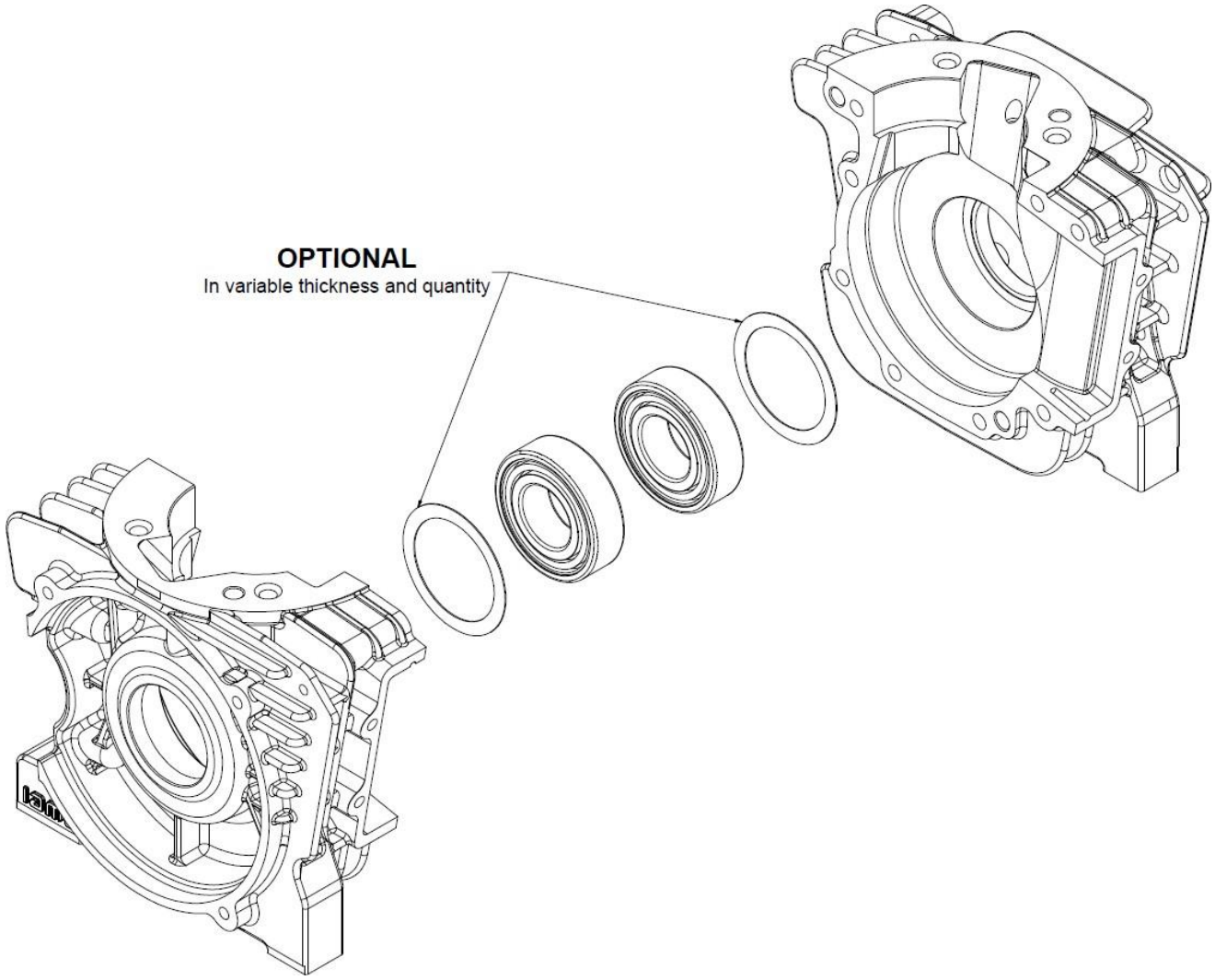
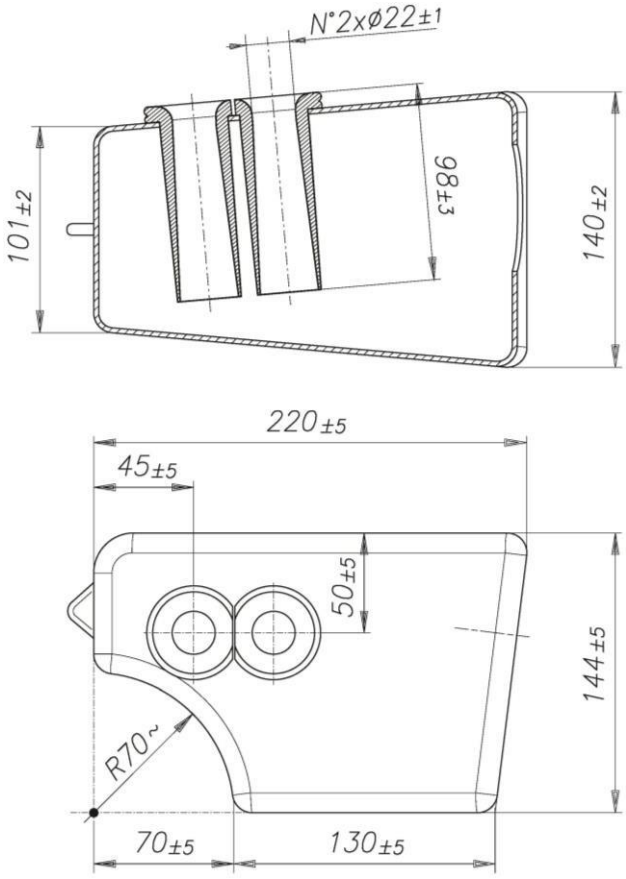


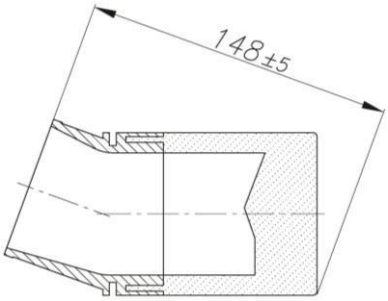
PHOTO IDENTIFICATION OF ALTERNATIVE ROLLER BEARING

Alternative bearing to 6205 type
Part No: BC1-1442 D

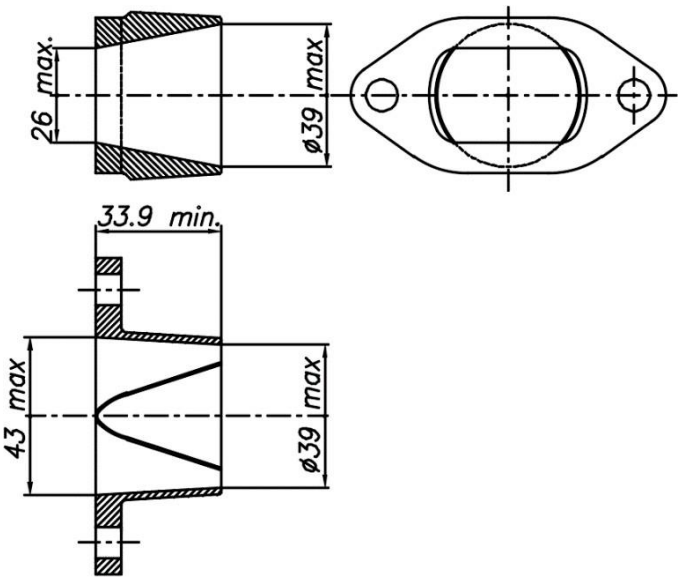
INLET SILENCER



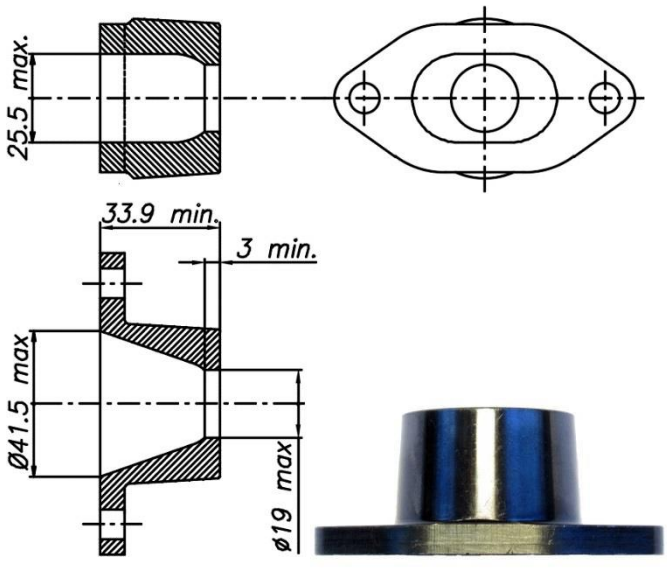
SPONGE FILTER INLET SILENCER



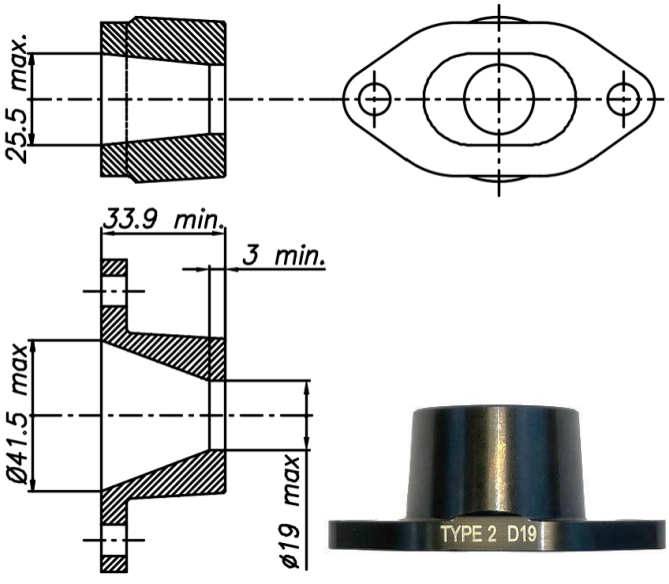
EXHAUST MANIFOLD OPEN



EXHAUST MANIFOLD RESTRICTED Ø19mm TYPE 1



EXHAUST MANIFOLD RESTRICTED Ø19mm TYPE 2



EXHAUST MANIFOLD RESTRICTED Ø22mm TYPE 3

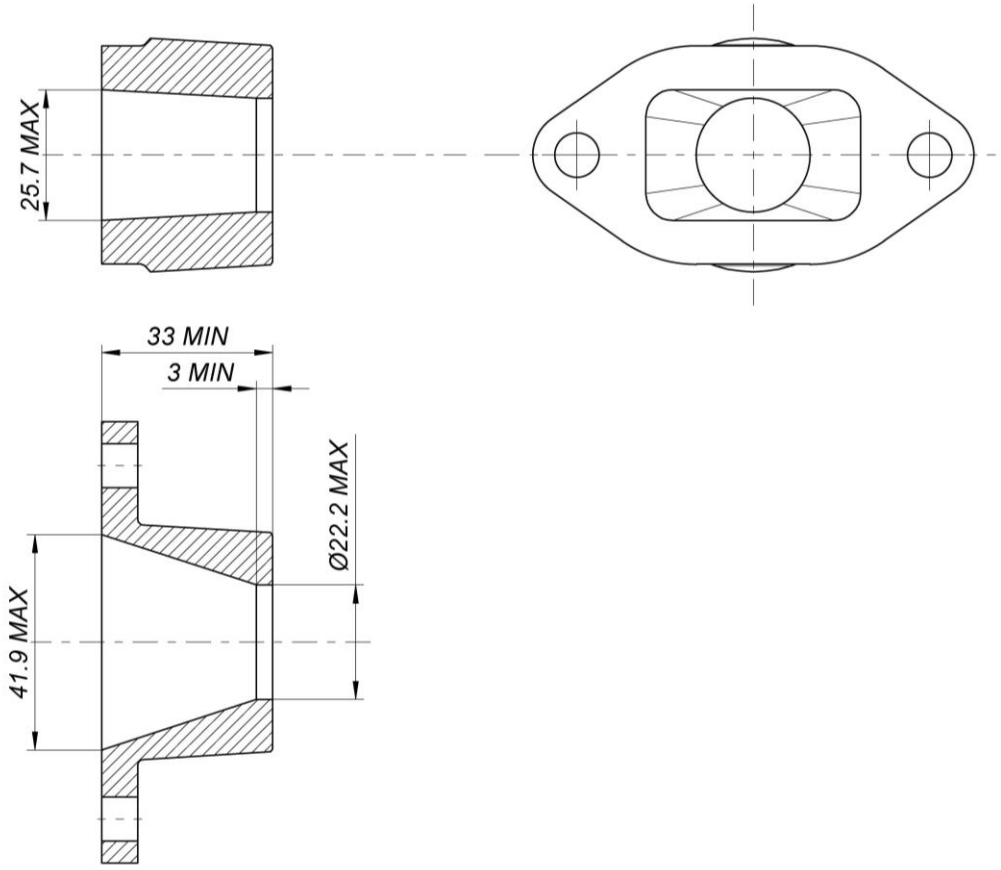


PHOTO IDENTIFICATION OF EXHAUST MANIFOLD RESTRICTED Ø22mm TYPE 3

INLET SILENCER TUBES NEW TYPE

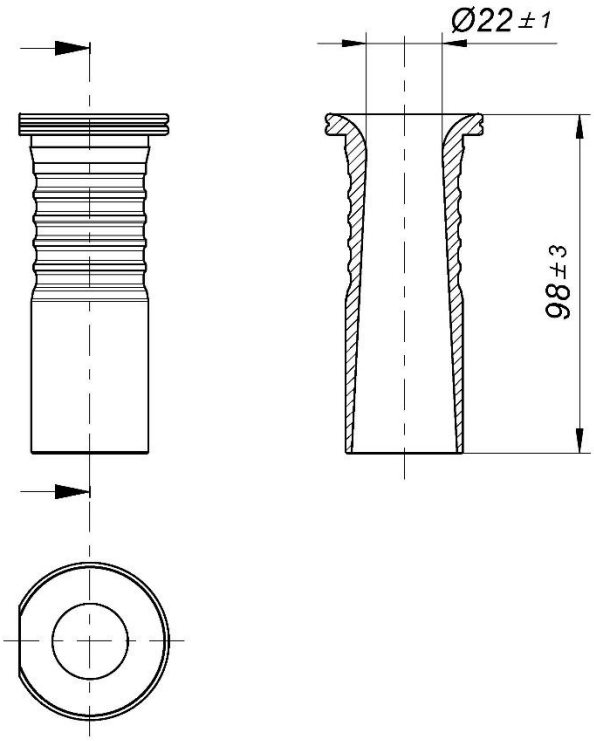


PHOTO IDENTIFICATION OF PERMISSIBLE INLET SILENCER TUBES

OLD TYPE

NEW TYPE

RAIN COVER INLET SILENCER – DRAWING

The IAME Rain Cover is the only airbox rain cover permitted to be attached to the induction silencer.

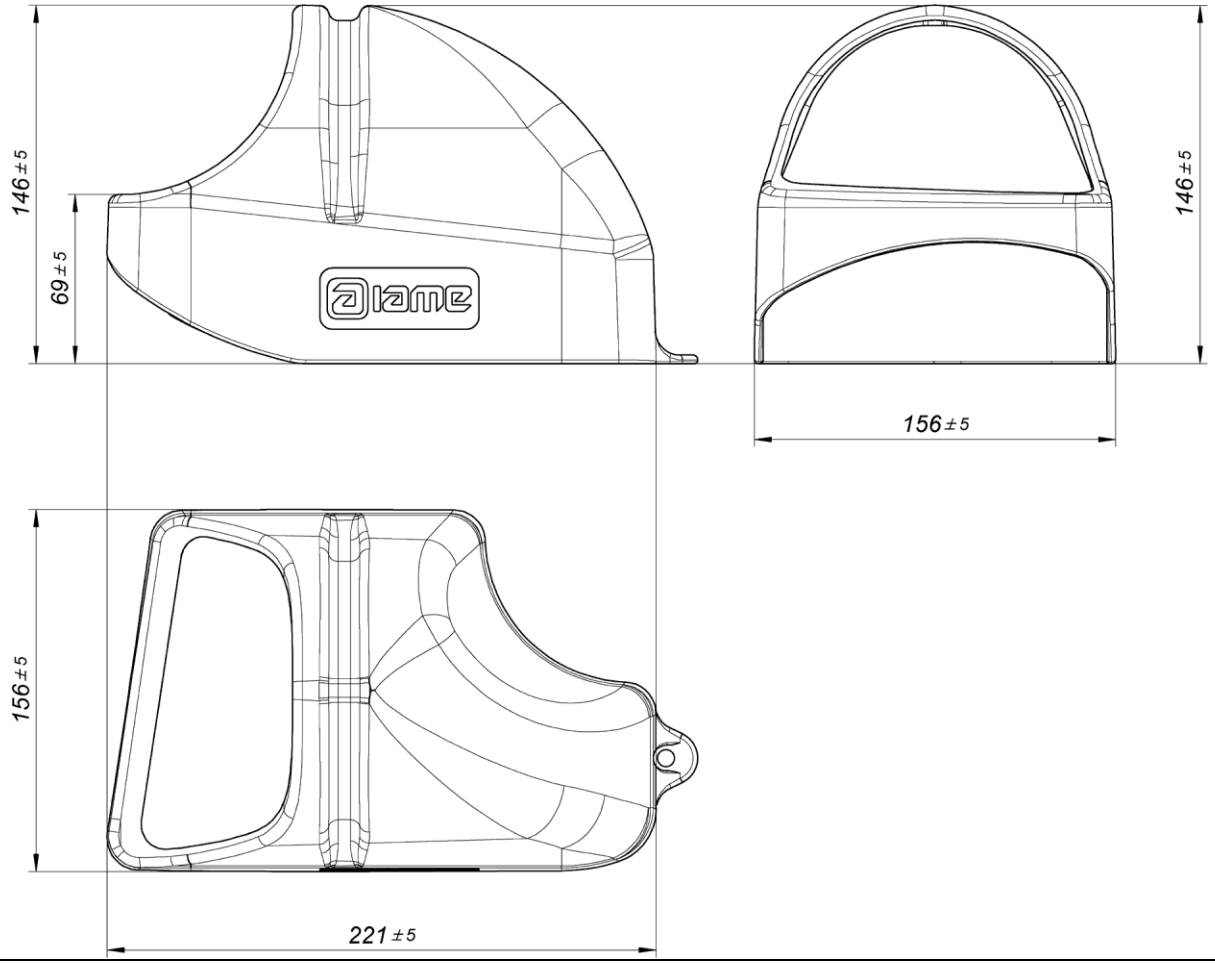
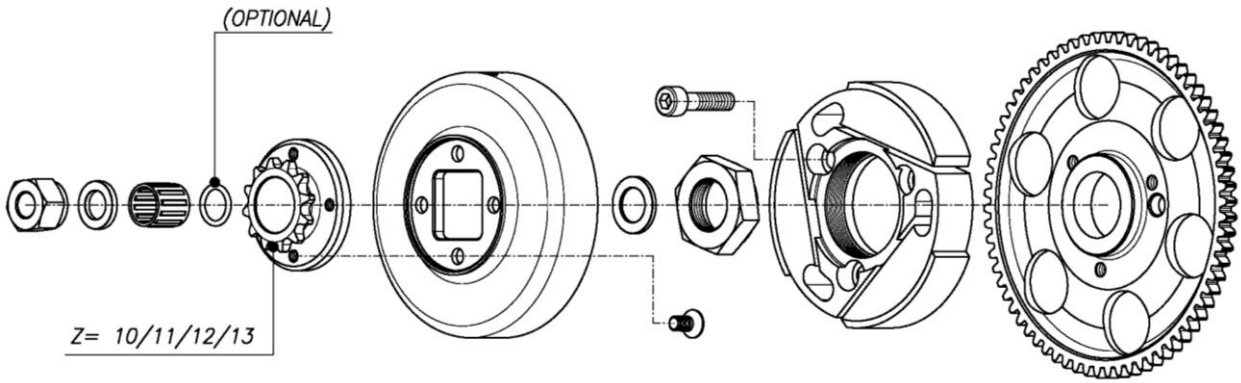


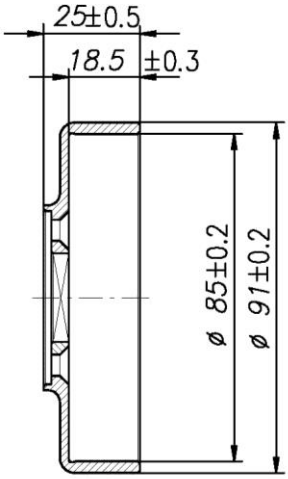
PHOTO IDENTIFICATION OF RAIN COVER INLET SILENCER

DESCRIPTION OF THE CLUTCH

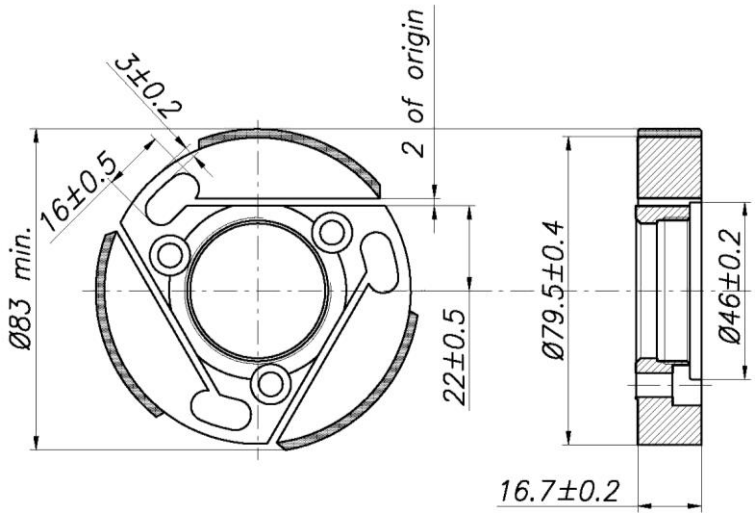


Min. weight = 300g

Min. weight = 630g

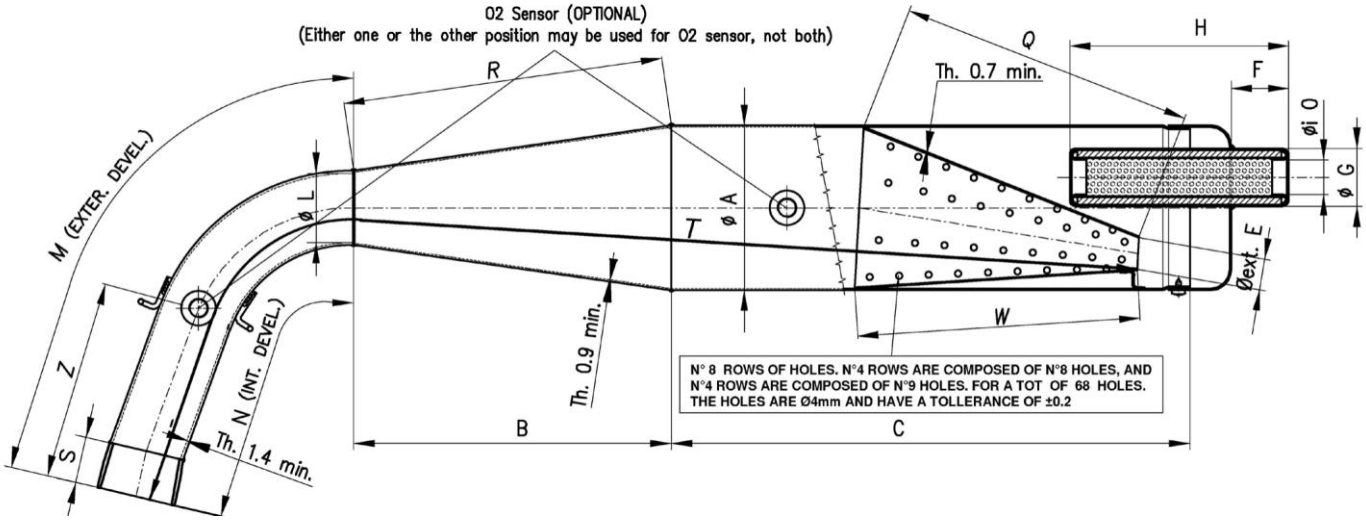


Min. weight = 225g



Min. weight = 375g

EXHAUST MUFFLER VIEW AND DIMENSIONS



Min. Weight: 1.905g

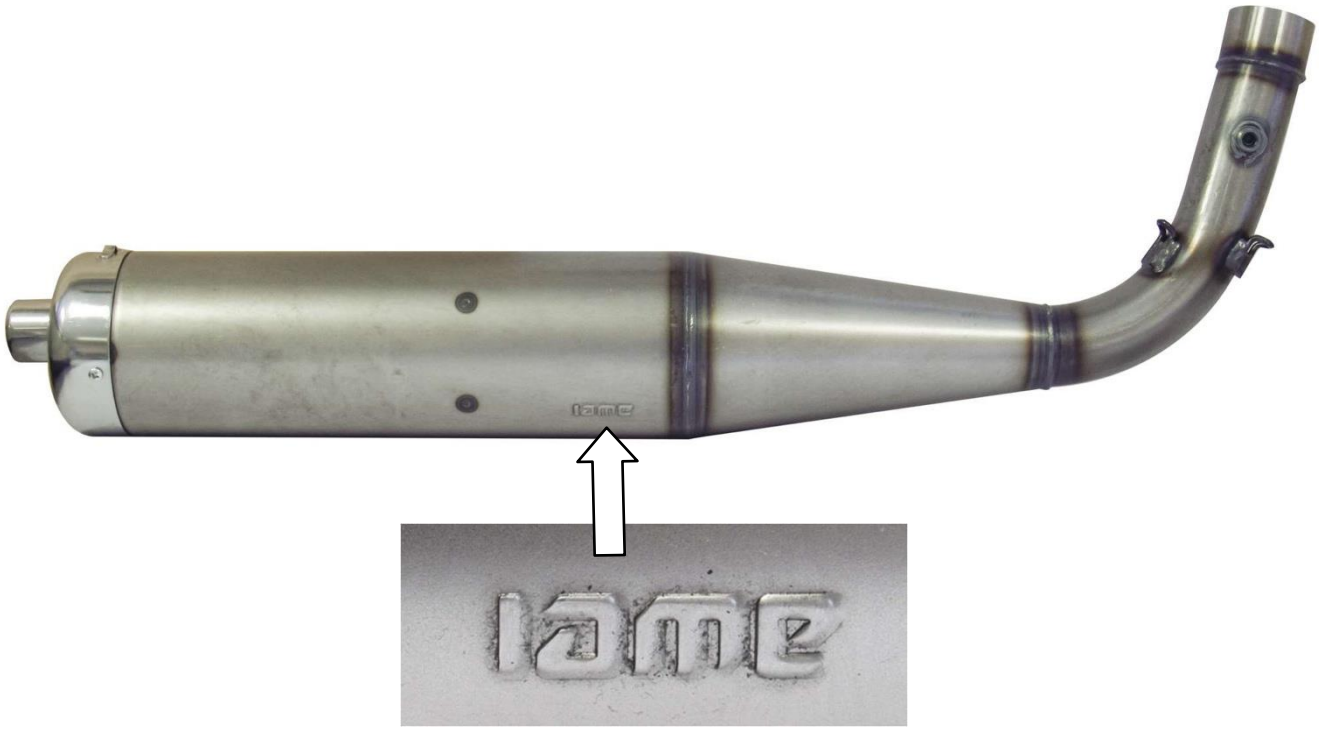
ØA: 100 ±1 Øext.	**ØE:** 23.5 ±2 Øext.	**N:** 210 ±3 ext.	**S:** 29 ±1.5
ØL: 45 ±1 Øext.	**F:** 36 ±2	**ØO:** 21 ±1 Øint.	**T:** 692 ±3
B: 193 ±3	**H:** 132 ±3	**R:** 194.5 ±3	**W:** 170 ±3
C: 315 ±3	**M:** 270 ±3 ext.	**Q:** 182 ±3	**Z:** 130 max

ATTENTION:

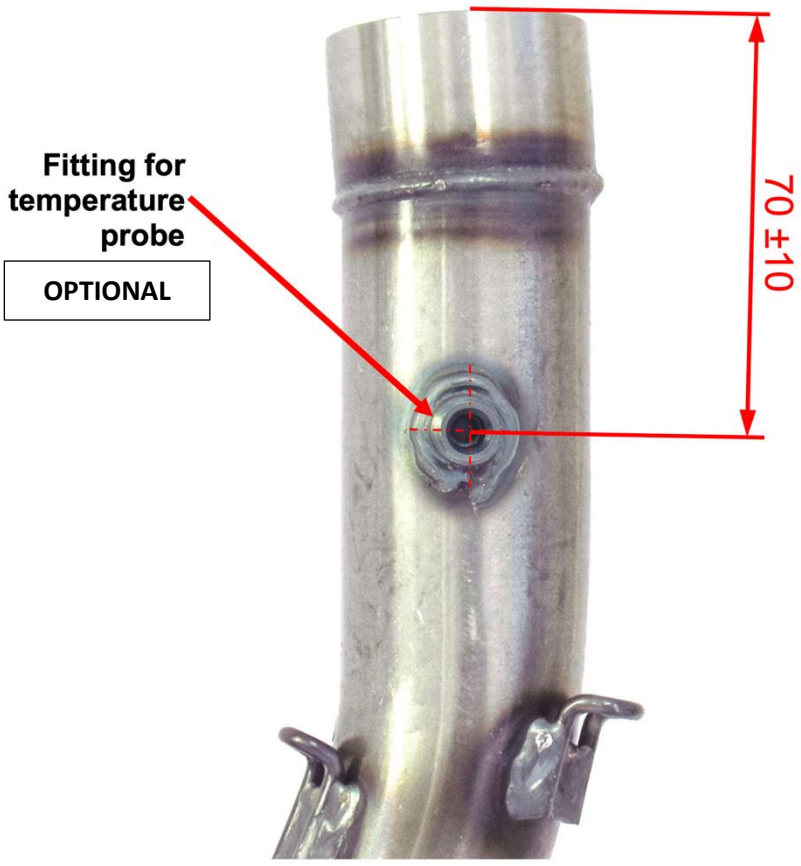
The dimensions "**M**", "**N**" and "**T**" must be taken by steel tape measure 6mm wide.

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

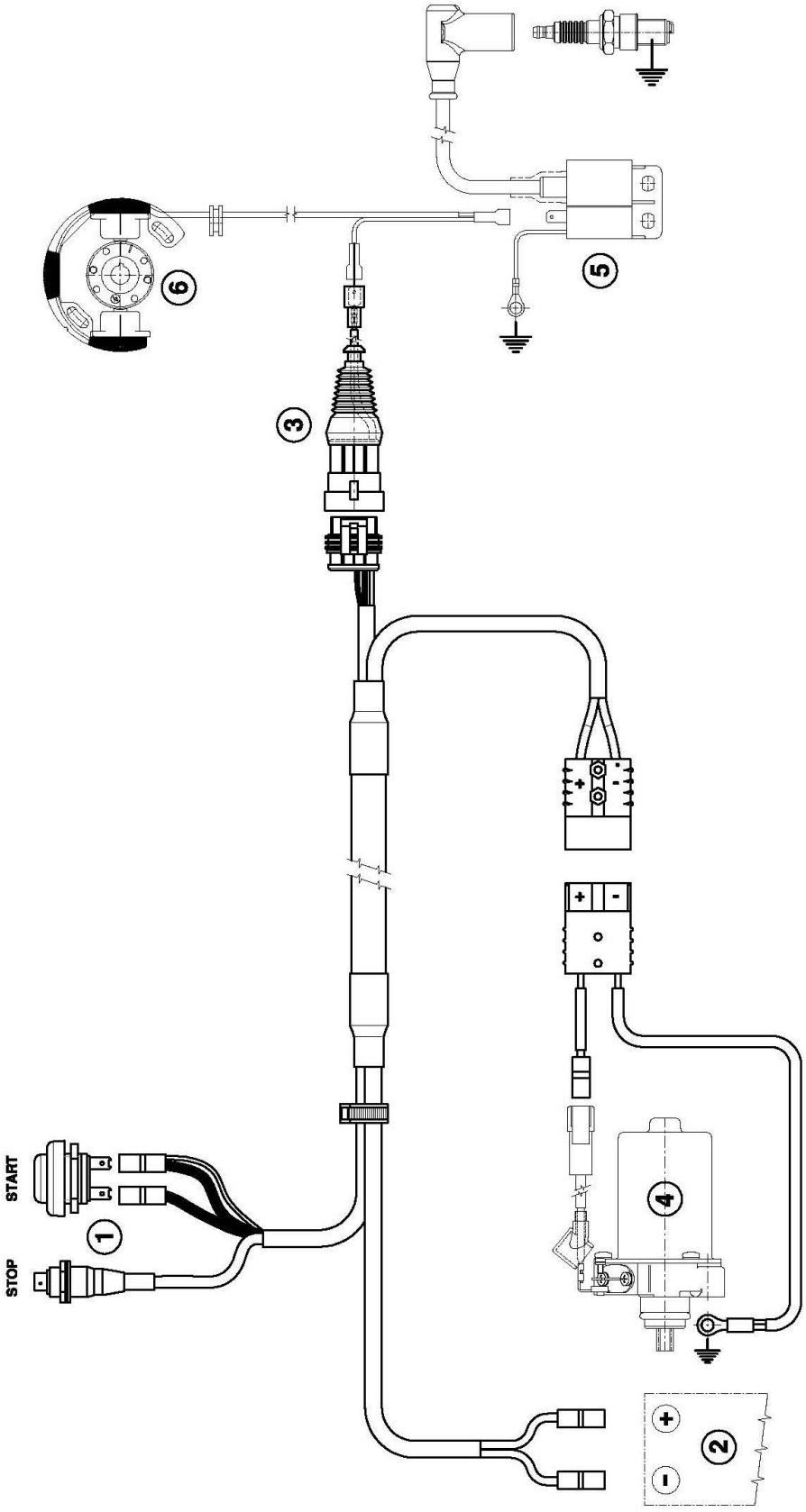
EXHAUST MUFFLER IDENTIFICATION



MARKING

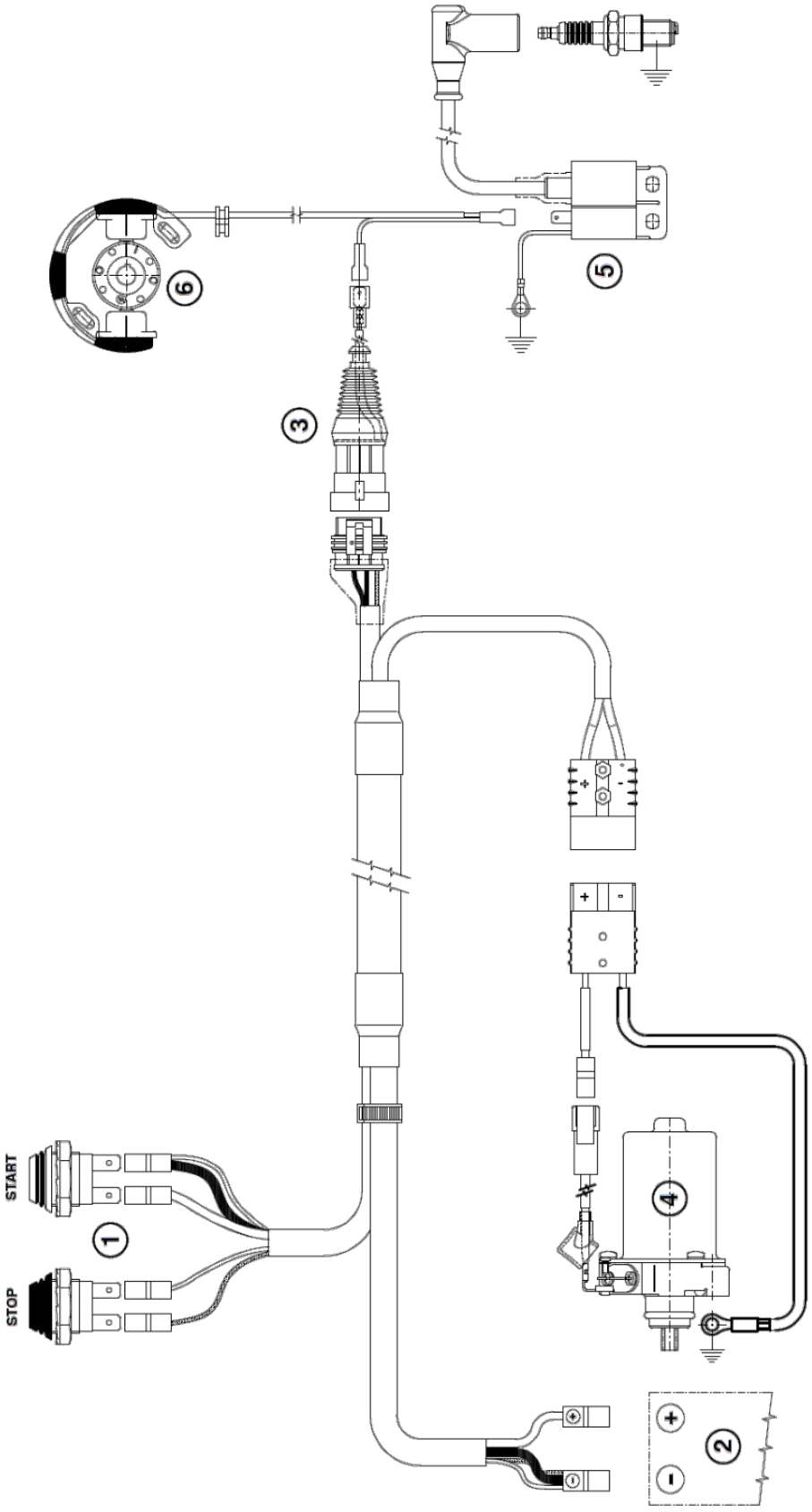


WIRING DIAGRAM



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

ALTERNATIVE WIRING DIAGRAM

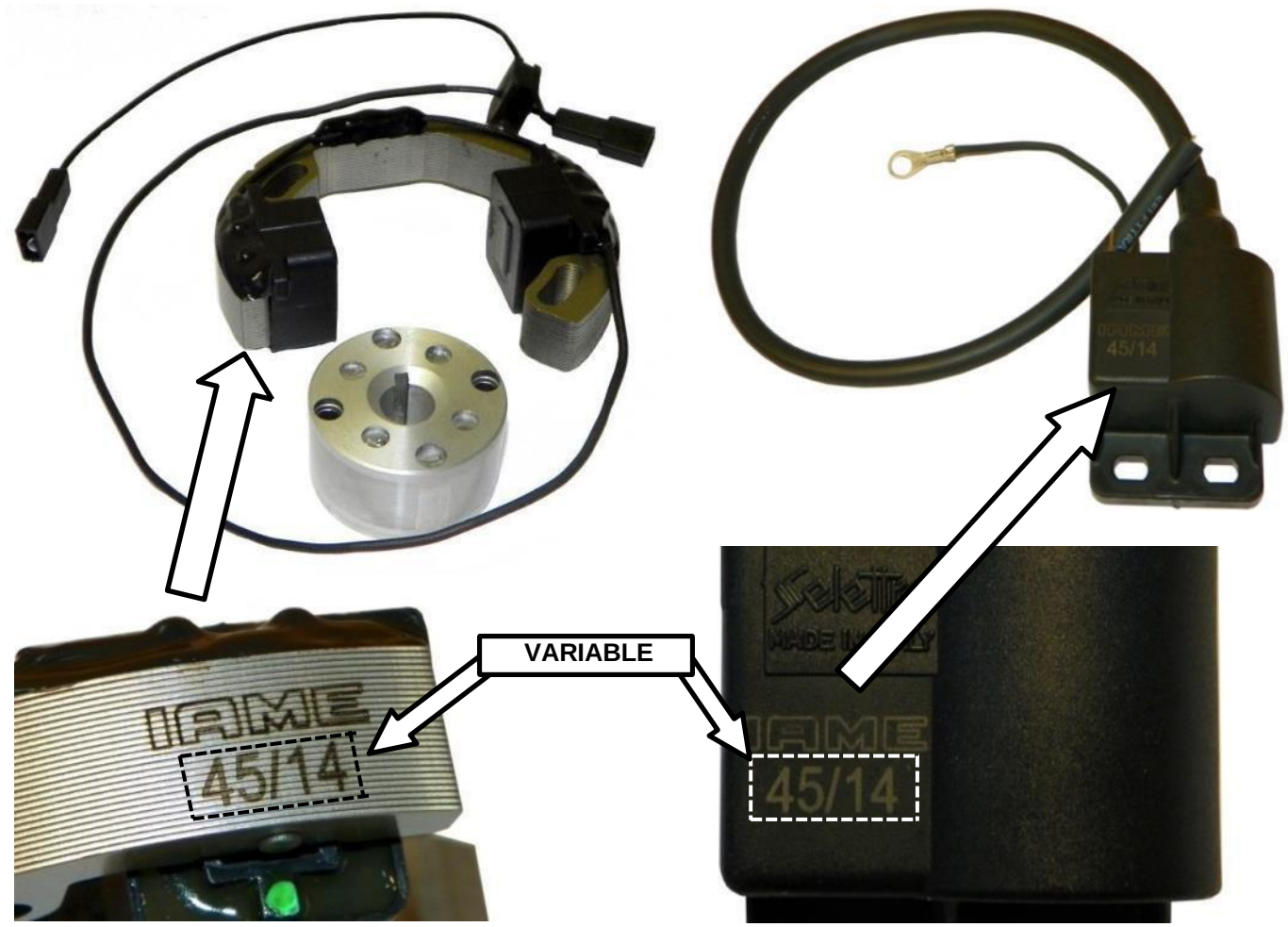


1- Push-Button Start & Stop
2- 2- Battery
3- Ignition Cable Adapter
4- 4- Starter
5- H.T. coil
6- Ignition

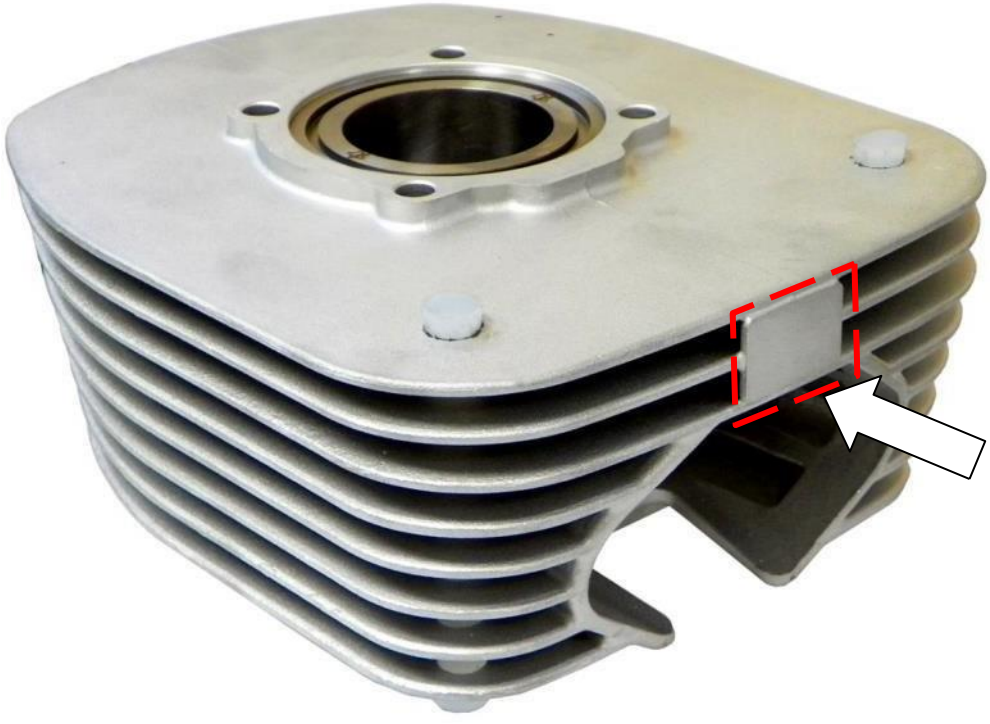
COMPLETE WIRING PHOTO

ALTERNATIVE COMPLETE WIRING PHOTO

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

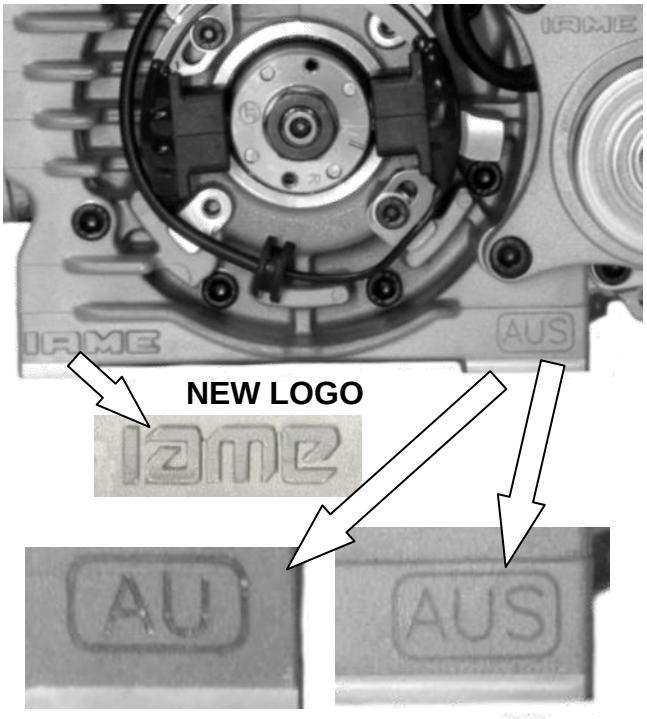


STICKER APPLICATION AREA

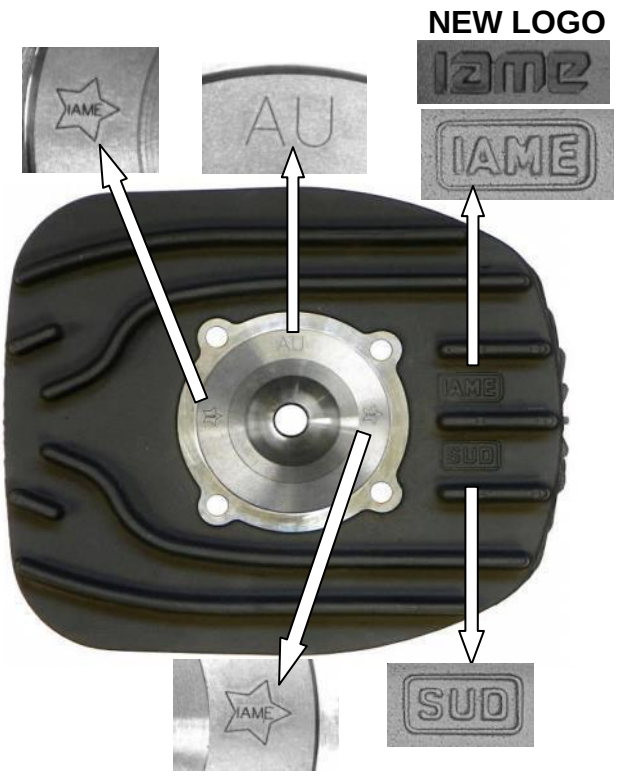


CYLINDER IDENTIFICATION MARKING

CRANKCASE IDENTIFICATION MARKING



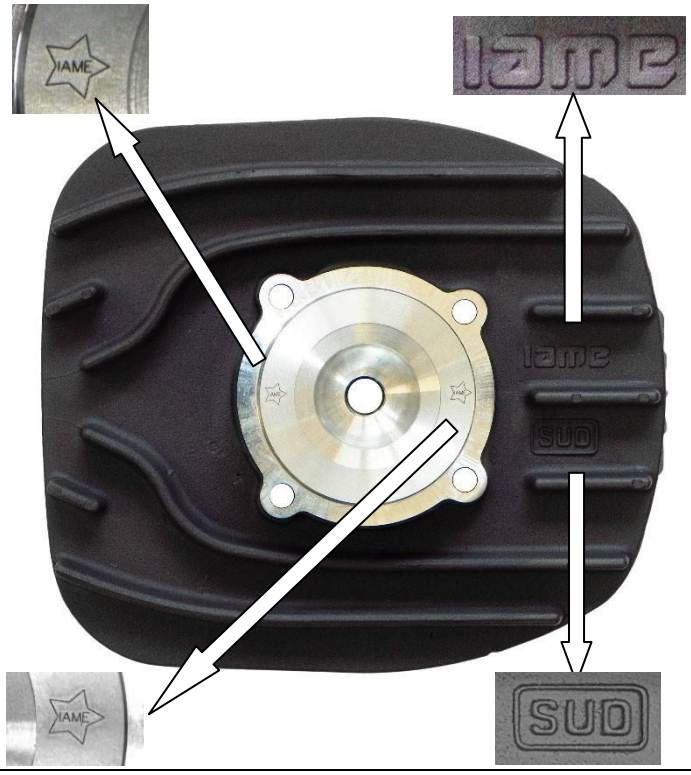
HEAD IDENTIFICATION MARKING



ALTERNATIVE CYLINDER IDENTIFICATION MARKING

ALTERNATIVE CRANKCASE IDENTIFICATION MARKING

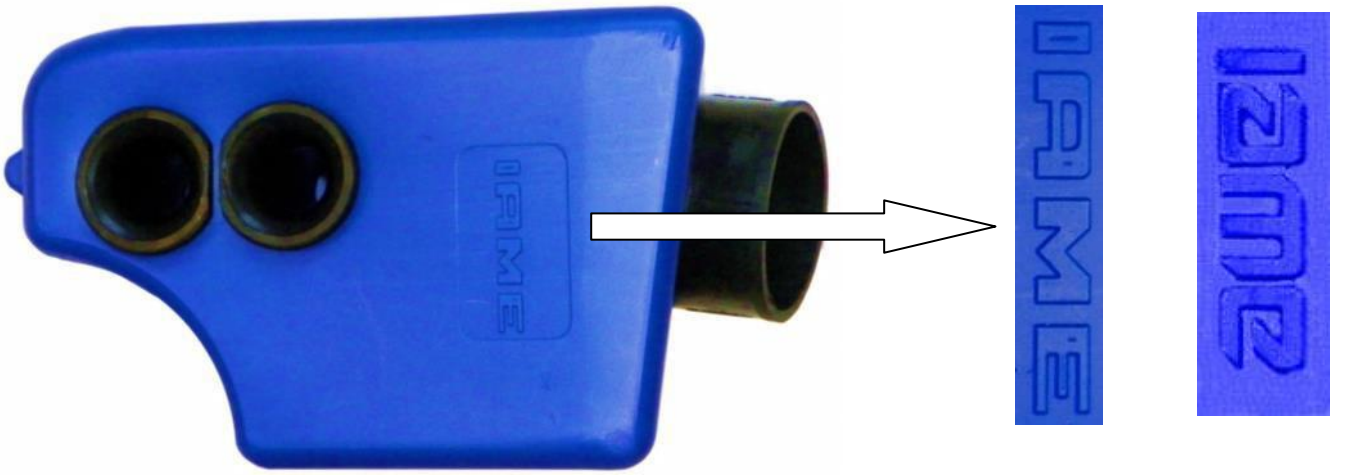
ALTERNATIVE CYLINDER HEAD IDENTIFICATION MARKING



INLET SILENCER - “IAME” IDENTIFICATION MARKING

VARIABLE IN COLOUR

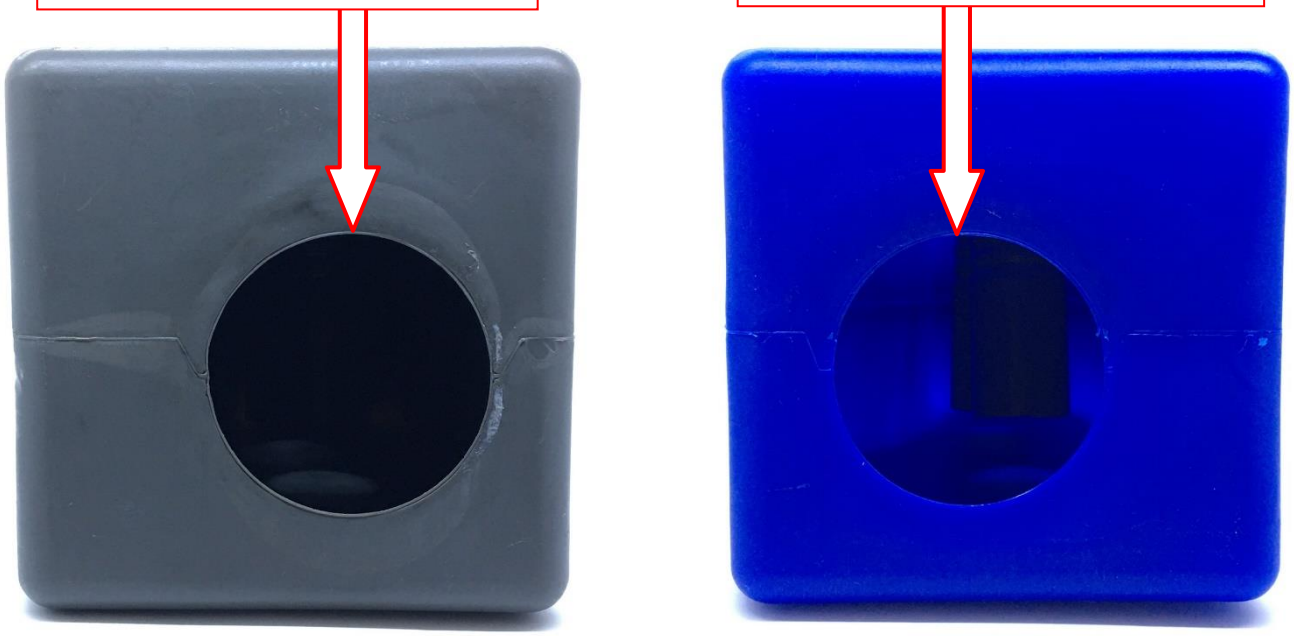
NEW LOGO



INLET SILENCER OUTLET LOCATION

ORIGINAL RIGHT ALIGNED OUTLET

ALTERNATIVE LEFT ALIGNED OUTLET



INLET SILENCER SPONGE FILTER

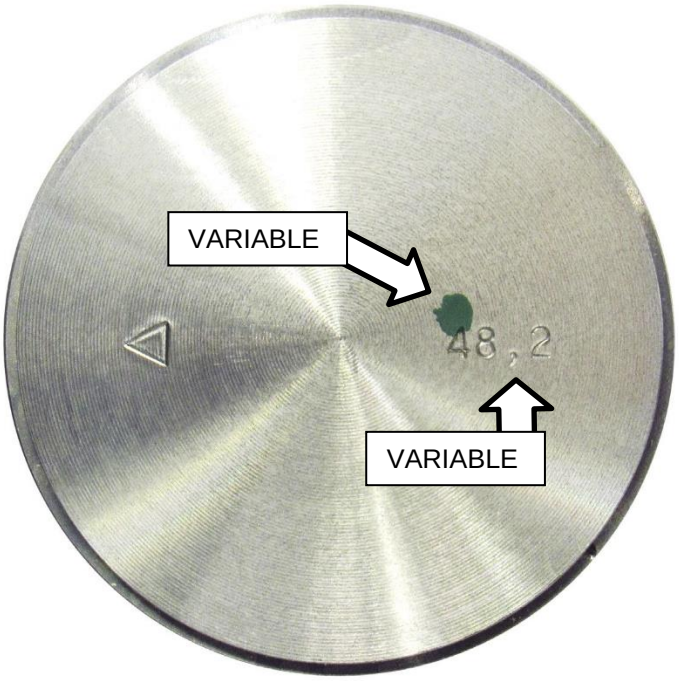
EITHER SPONGE FILTER IS PERMITTED FOR USE

USE OF A FILTER IS COMPULSORY

RED (CORSE)

GREEN (FINE)

PISTON IDENTIFICATION MARKING



ALTERNATIVE PISTON IDENTIFICATION MARKING

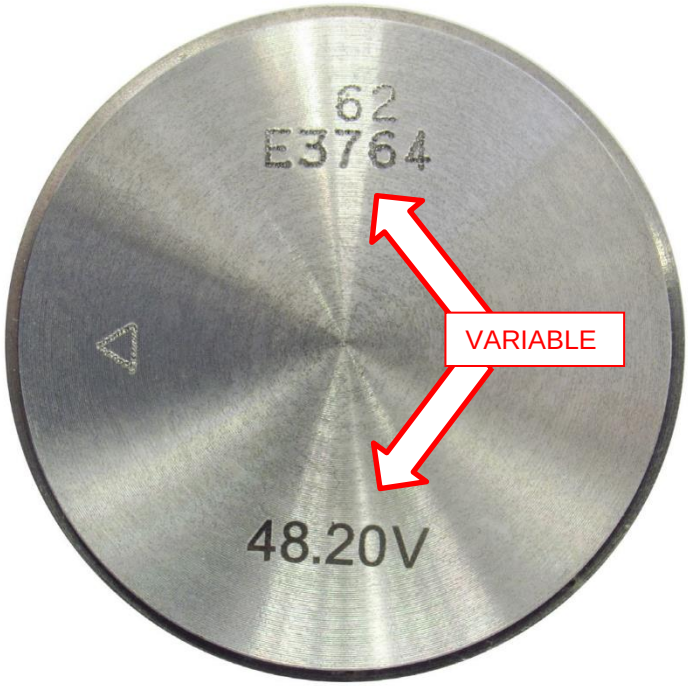


PHOTO IDENTIFICATION CONROD

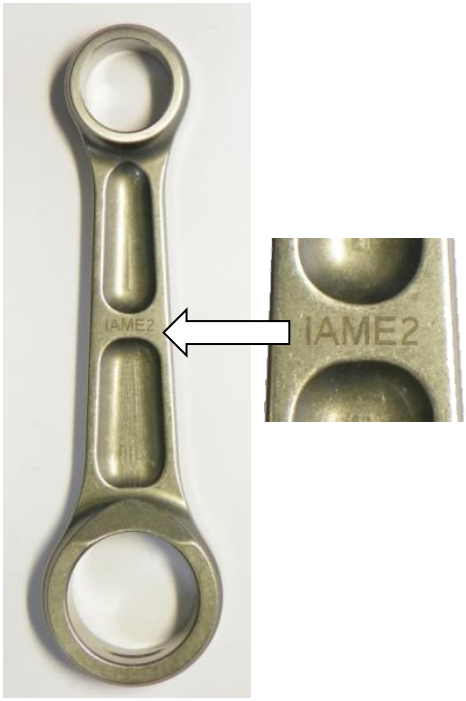
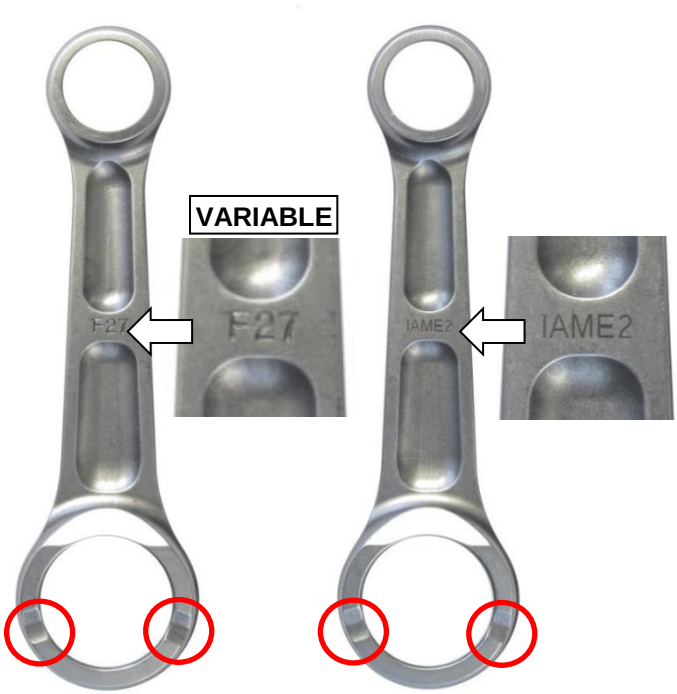


PHOTO OF ALTERNATIVE CONROD



Lubrication Slots - Circled

PHOTO IDENTIFICATION OF SMALL END CONROD BEARING – TYPES ALTERNATIVE

TYPE 1

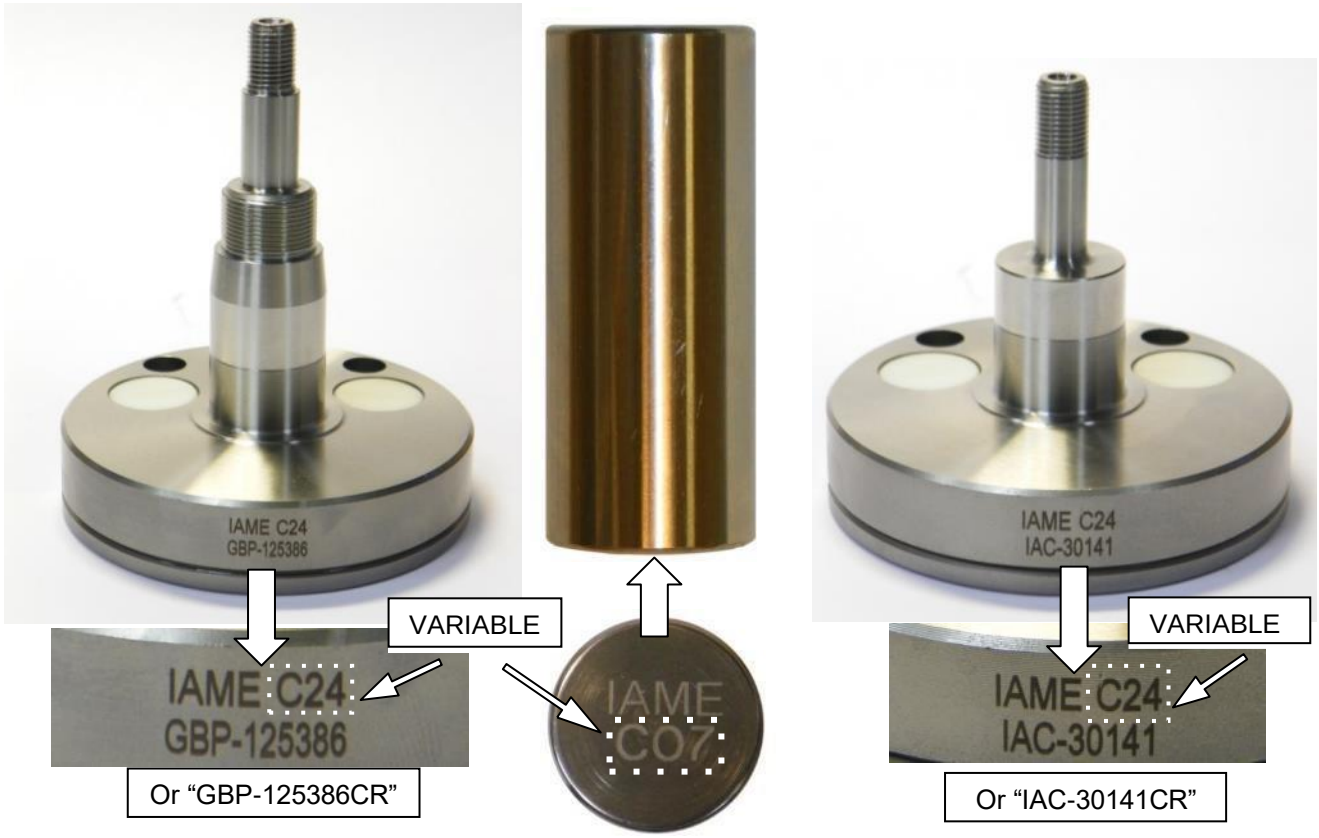
TYPE 2

PHOTO IDENTIFICATION OF SILVER CONROD WASHER – TYPES ALTERNATIVE

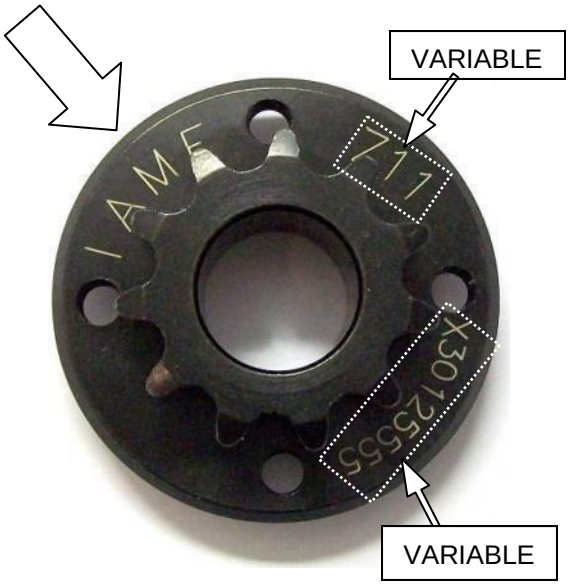
TYPE 1

TYPE 2

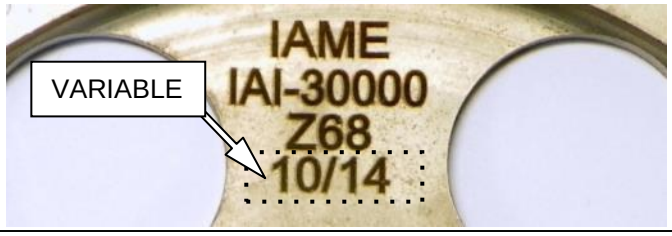
CRANKSHAFT IDENTIFICATION MARKING



SPROCKET IDENTIFICATION MARKING



STARTER RING IDENTIFICATION MARKING



CLUTCH BODY IDENTIFICATION MARKING

FRICTION MATERIAL

ALTERNATIVE

VARIABLE

CLUTCH DRUM IDENTIFICATION MARKING

CARBURETTOR INLET CONVEYOR IDENTIFICATION MARKING

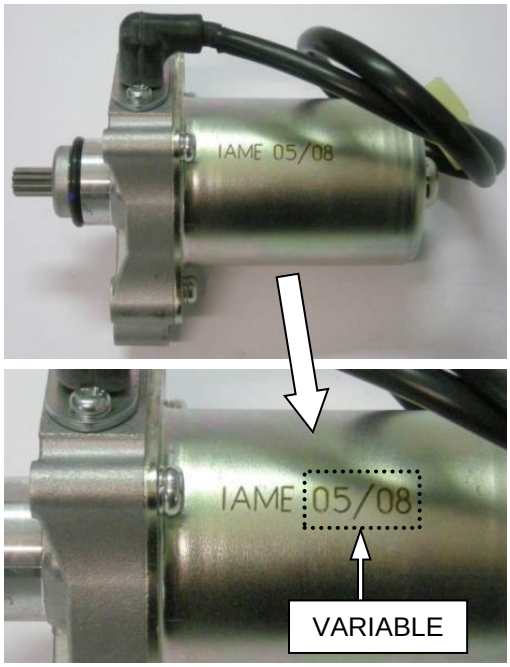
NEW LOGO

BENDIX COVER IDENTIFICATION MARKING

REAR SIDE

FRONT SIDE

STARTER IDENTIFICATION MARKING

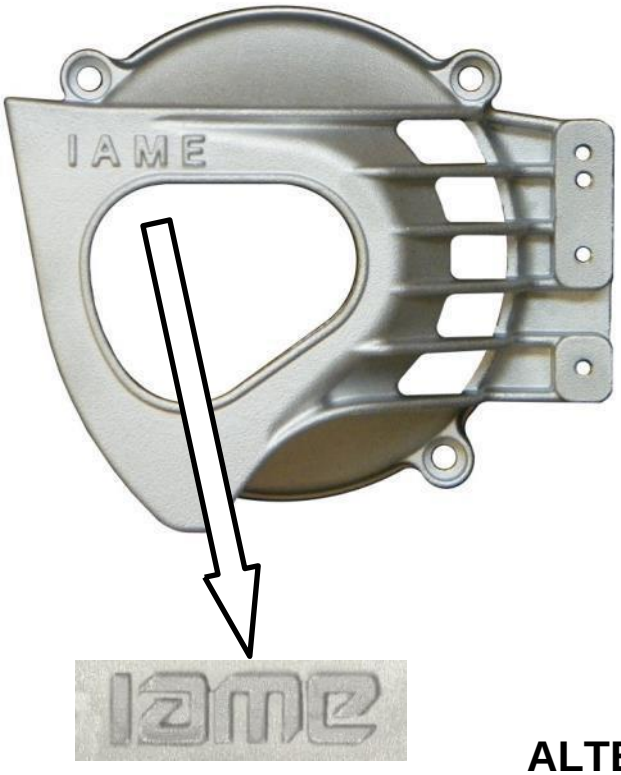


EXHAUST SILENCER IDENTIFICATION MARKING

NEW LOGO

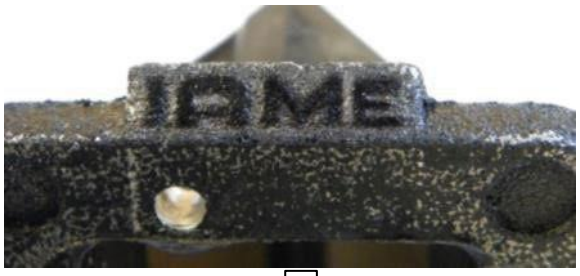
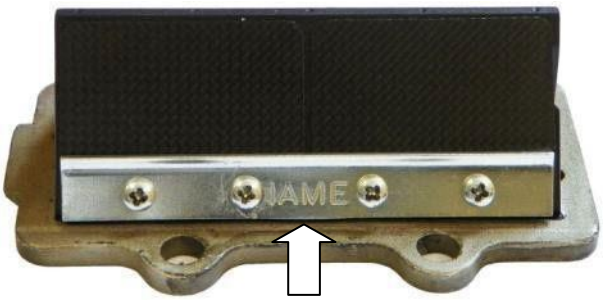
NEW LOGO

CLUTCH COVER - ALTERNATIVE SHAPE, SURFACE FINISHING AND MARKING



ALTERNATIVE

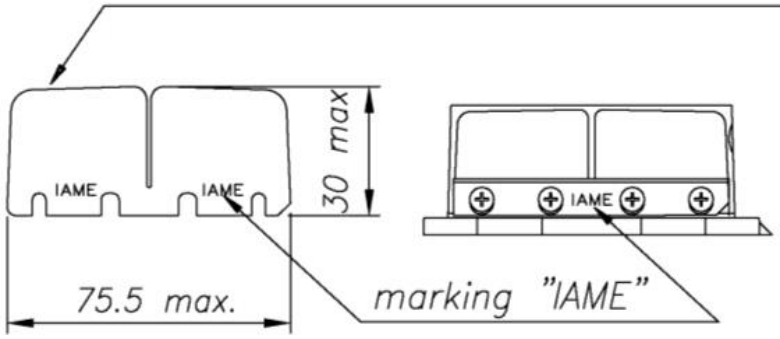
NEW LOGO

REED GROUP IDENTIFICATION MARKING	
CURRENT VERSION	ALTERNATIVE VERSION
NEW LOGO 	**NEW LOGO** 
	
	
	

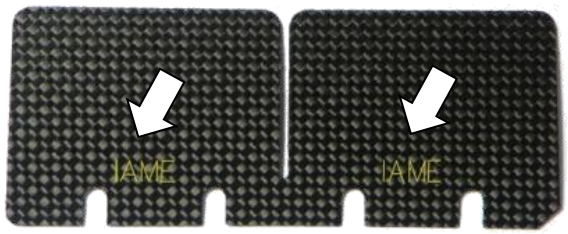
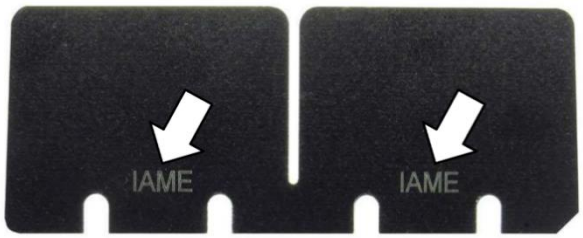
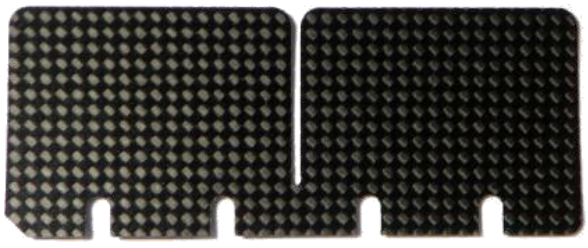
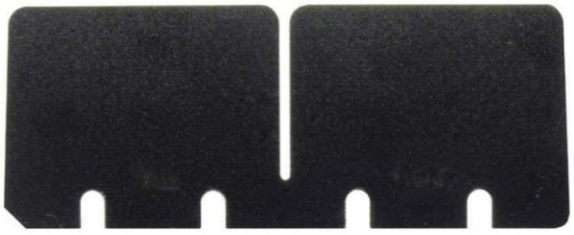
REED PETALS DIMENSIONS

It is permitted to use either Carbon Fibre **or** Fibreglass Reed Petals

IAME Carbon Fibre Reed Petals min. thickness = 0.22mm
IAME Fibreglass Reed Petals min. thickness = 0.30mm



REED PETALS – IMAGES AND IDENTIFICATION MARKS

CARBON FIBRE	FIBREGLASS
Front Side	Front Side
	
Rear Side	Rear Side
	

ALTERNATIVE INSTALLATION OF GROUND CABLE ON THE CRANKCASE

STANDARD INSTALLATION

ALTERNATIVE INSTALLATION

COMPONENTS WITH ALTERNATIVE NEW LOGO "IAME"

CRANKCASE TRANSMISSION SIDE

NEW LOGO

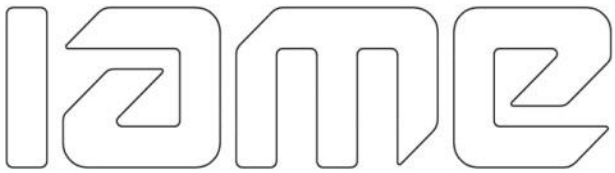
ALTERNATIVE SHAPE

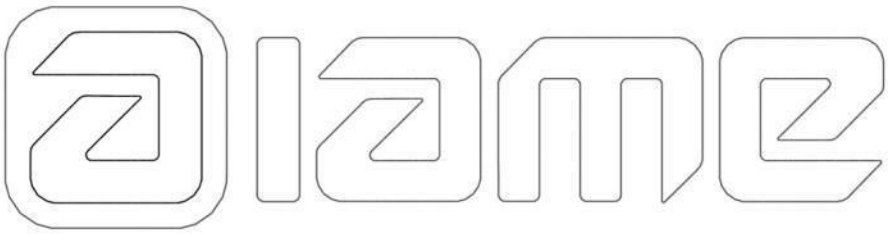
STARTER SUPPORT

NEW LOGO

IAME MARKINGS GENERAL

Engine components may be marked with <u>any</u> of the following marks





IAME

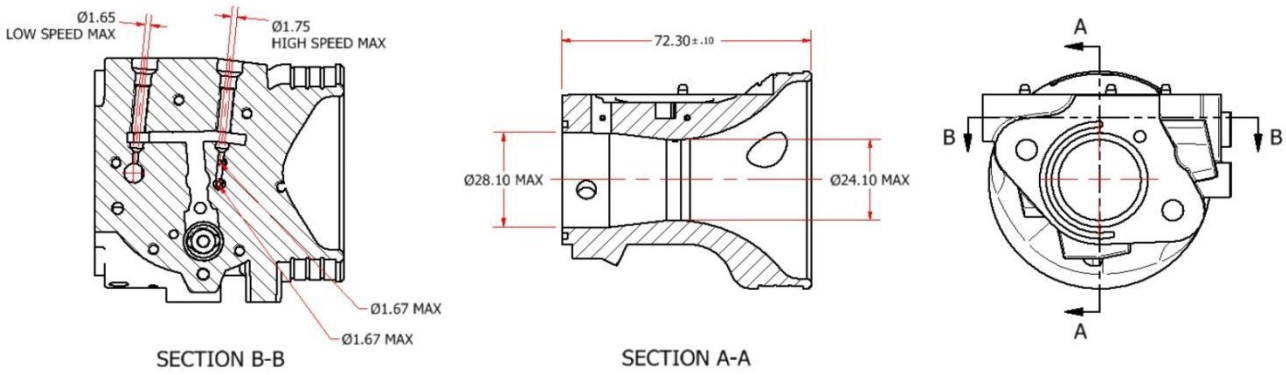
CARBURETTOR

Tillotson HW-33A

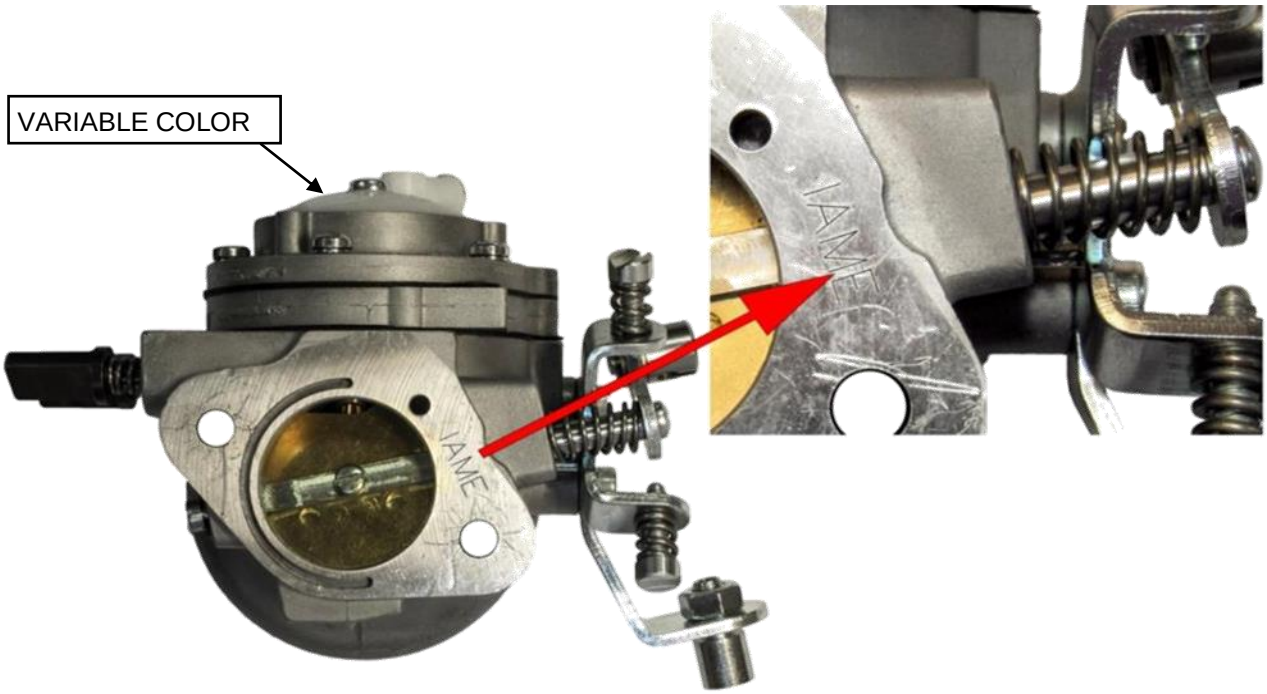
	
PHOTO OF ADJUSTING SIDE	PHOTO OF INLET SIDE

Manufacturer	**TILLOTSON LTD.**
Make	**TILLOTSON**
Model	**HW-33A**

SECTION VIEW

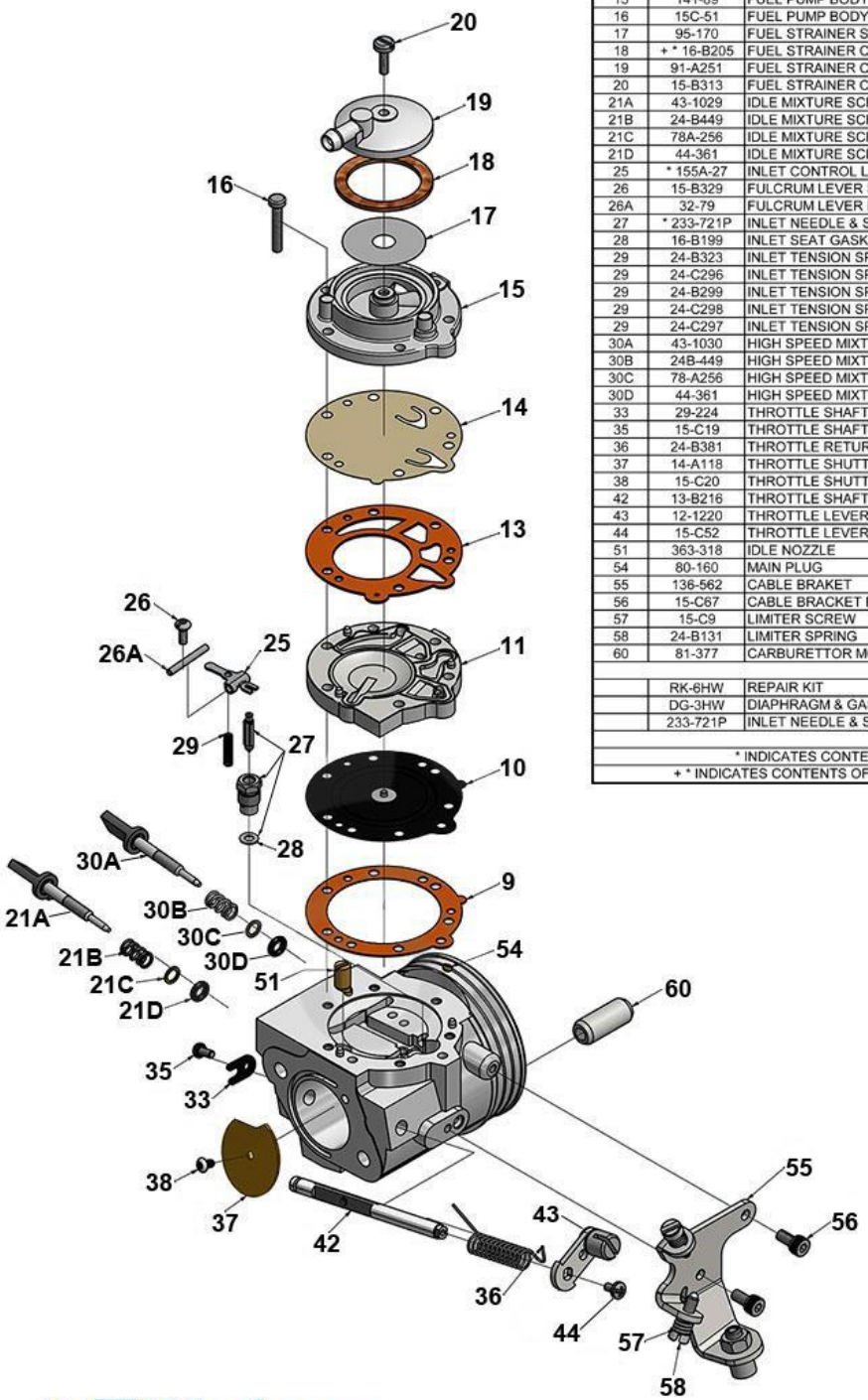


IAME IDENTIFICATION MARKING



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 BRAKET	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

ALTERNATIVE

Thickness = 0.10 ±0.063 mm

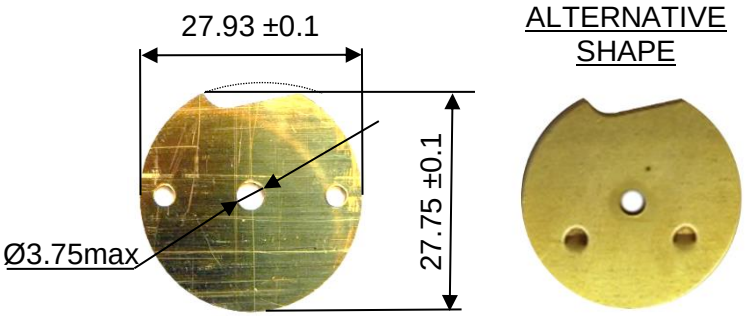
REF.11 - P. N° 91-A275
DIAPHRAGM COVER

Thickness = 6.75 ±0.15 mm

REF.15 - P. N° 141-89
PUMP COVER

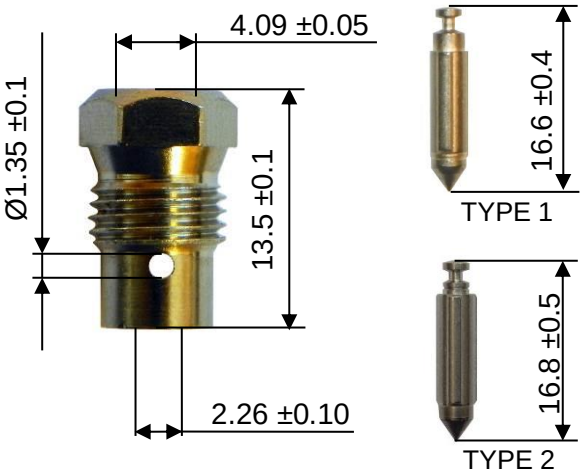
Thickness = 12.5 ±0.15 mm

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

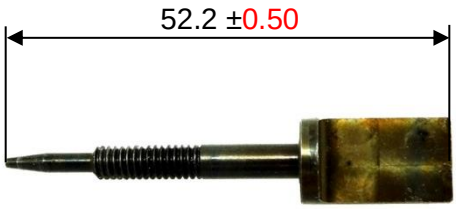


Thickness = 0.84 ±0.1 mm

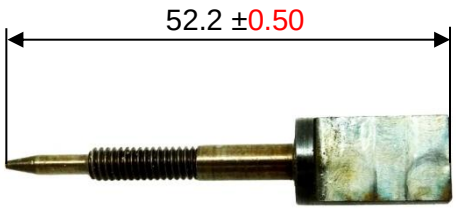
REF.27 - P. N° 233-721P
SEAT + NEEDLE



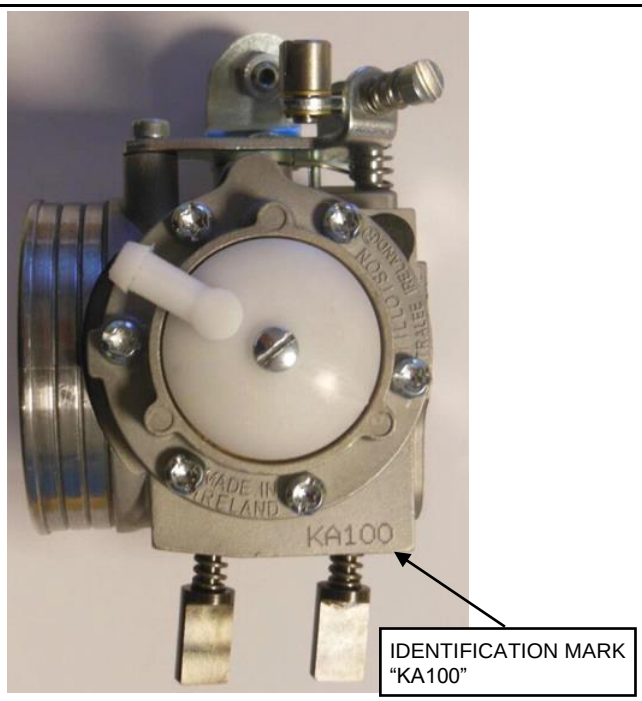
REF.21A - P. N° 43-1029
NEEDLE LOW SPEED



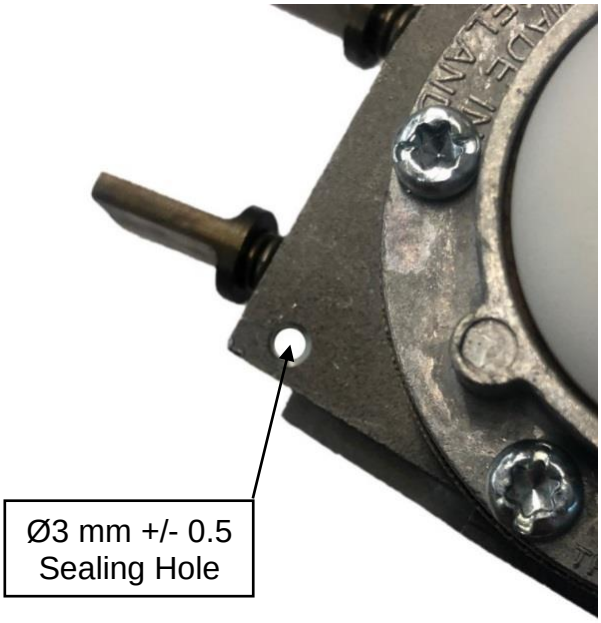
REF.30A - P. N° 43-1030
NEEDLE HIGH SPEED



IAME IDENTIFICATION MARKING



OPTIONAL HOLE FOR SEALING TAG



RE-HOMOLOGATED 31-1-2019

106H - RH

CARBURETTOR

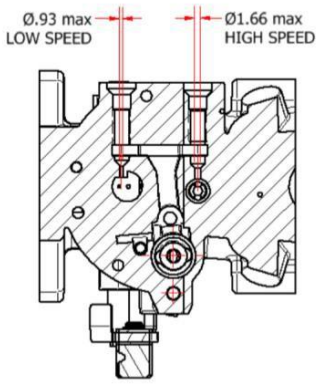
Tillotson HL-398A

PHOTO OF ADJUSTING SIDE

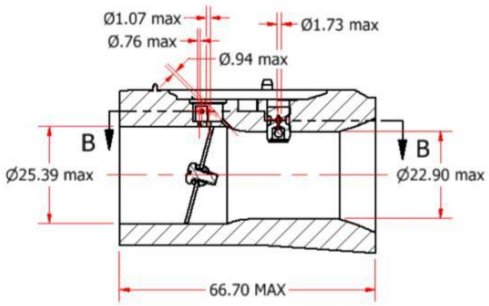
PHOTO OF INLET SIDE

Manufacturer	**TILLOTSON LTD.**
Make	**TILLOTSON**
Model	**HL-398A**

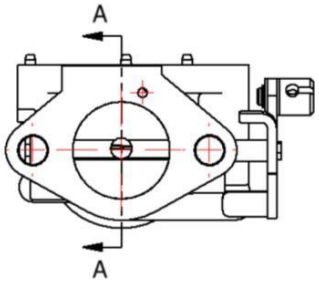
SECTION VIEW



SECTION B-B



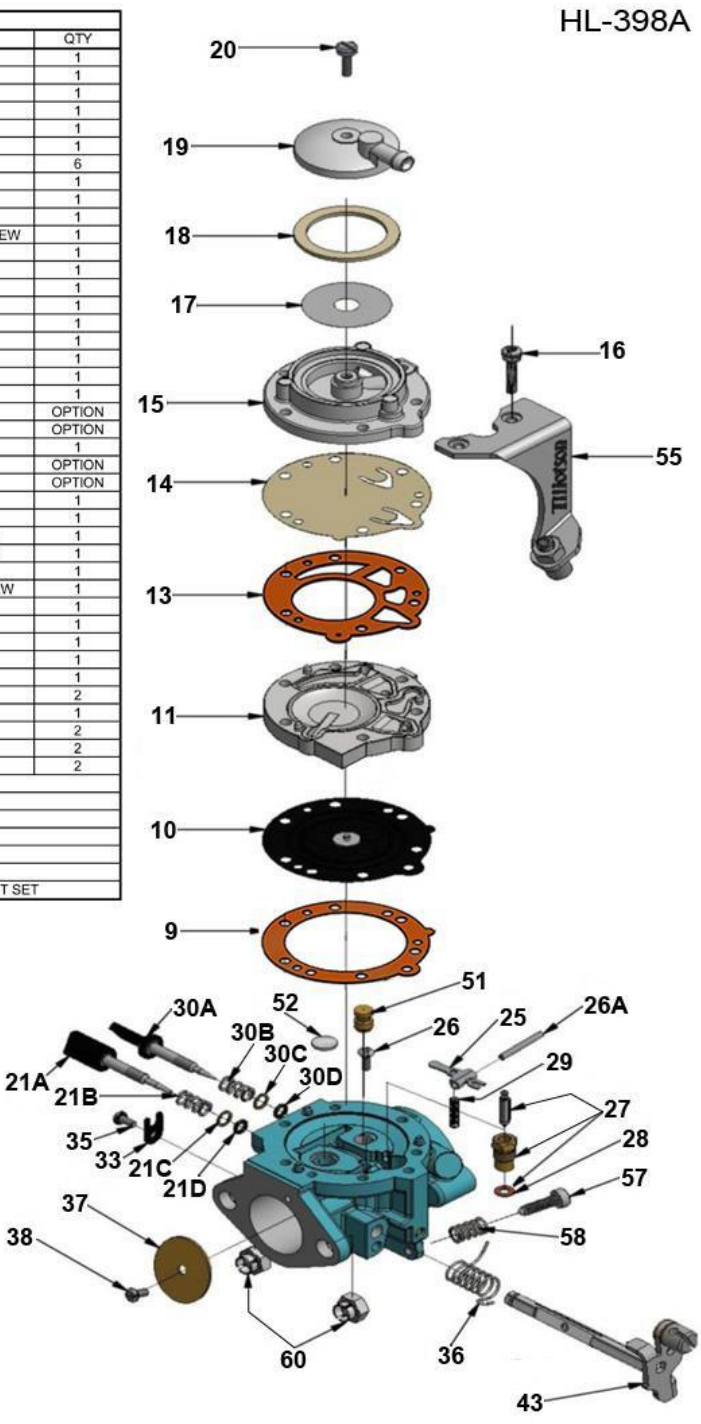
SECTION A-A



CABLE BRACKET

CARBURETTOR DESCRIPTION AND SKETCH OF PARTS

HL-398A 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	43-1039	IDLE MIXTURE SCREW	1
21B	24-B449	IDLE MIXTURE SCREW SPRING	1
21C	78A-256	IDLE MIXTURE SCREW WASHER	1
21D	44-270	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	43-1038	HIGH SPEED MIXTURE SCREW	1
30B	24B-449	HIGH SPEED MIXTURE SCREW SPRING	1
30C	78-A256	HIGH SPEED MIXTURE SCREW WASHER	1
30D	44-270	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	14-407	THROTTLE SHUTTER	1
38	15-C29	THROTTLE SHUTTER SCREW	1
43	13-2158	THROTTLE SHAFT ASSEMBLY	1
51	363-503	MAIN NOZZLE	1
54	179-55	WELCH PLUG	2
55	136-565	CABLE BRAKET	1
57	15-C9	LIMITER SCREW	2
58	24-B131	LIMITER SPRING	2
60	81-380	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

ALTERNATIVE

Thickness = 0.10 ±0.063 mm

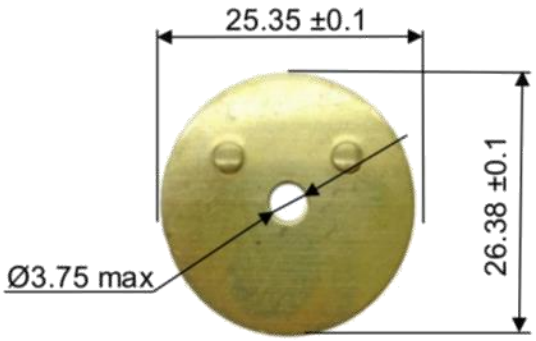
REF.11 - P. N° 91-A275
DIAPHRAGM COVER

Thickness = 6.75 ±0.15 mm

REF.15 - P. N° 141-89
PUMP COVER

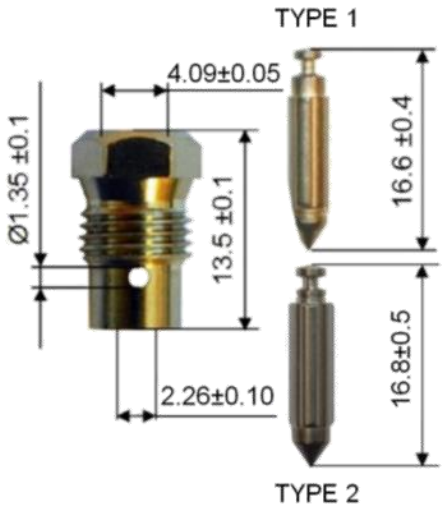
Thickness = 12.5 ±0.15 mm

REF.37 - P. N° 14-407
THROTTLE SHUTTER



Thickness = 0.81 ±0.1 mm

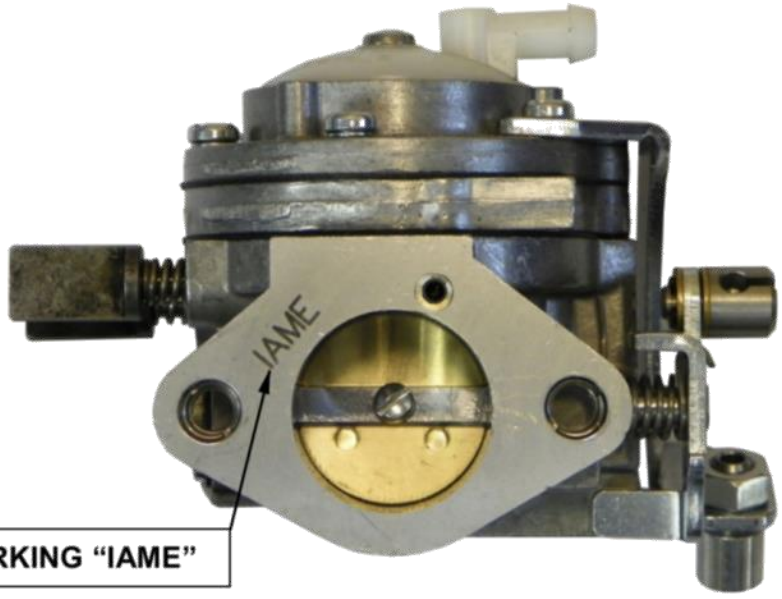
REF.27 - P. N° 233-721P
SEAT + NEEDLE



REF.21A - P. N° 43-1039
NEEDLE LOW SPEED

REF.30A - P. N° 43-1038
NEEDLE HIGH SPEED

MARKING



LASER MARKING "IAME"

Appendix A to the IAME KA100 Reedjet Homologation Documents

The following notes are additional to the details contained in these homologation documents for the IAME KA100 Reedjet engine (the "**Engine**") and are to be read in conjunction with the specifications and details contained therein; they form part of the Homologation Documents for the Engine.
The Engine must at all times be used and presented in strict conformity with the specifications detailed in the homologation documents. All engines must be imported into Australia by Remo Racing Pty Ltd; engine numbers will be recorded. **Unless otherwise expressly permitted by Karting Australia, the Engine must use only IAME OEM parts in accordance with this Homologation Document.**

Neither the Engine nor any of its ancillary components may be modified other than in accordance with the rules and these homologation documents. Any removal, addition or polishing of material is strictly forbidden.
Sandblasting, glass bead blasting, vapor blasting, wet blasting, liquid honing, peening, acid etching, spark eroding and/or any other method of metal removal or displacement is not allowed.
The use of thermal barrier coatings/ceramic coatings on or in the Engine/Engine components and on or in exhaust components is prohibited. The use of anti-friction coatings on or in the Engine/Engine components is prohibited. OEM pistons are exempt.

UNLESS IN THE KARTING AUSTRALIA RULES AND/OR THESE HOMOLOGATION DOCUMENTS IT SAYS THAT YOU CAN, THEN YOU CANNOT.

A. Base Gaskets

1. Only genuine IAME base gaskets are permitted.
2. The base gasket/gaskets must have a combined measurement of a minimum of 0.25mm and a maximum of 0.45mm. More than 1 base gasket can be used.

B. Cylinder Head

1. No material is to be added except for the purpose of spark plug thread repair.
2. The distance from the spark plug sealing face to combustion chamber ceiling face: 29.5mm+/-0.25mm.
3. The combustion chamber volume shall be a minimum of 9.2cc using the KA Type 1 CC plug.
4. The combustion chamber volume in the cylinder head (with Volumeter and KA Type 1 CC plug): 11.3-cm³ min.
5. Cylinder head profile must not vary from the original profile and will be checked with the IAME Cylinder Head Profile Gauge (part number ATT-063/1).

C. Head Gasket

1. If cylinder head gasket/gaskets are fitted, the maximum thickness of any gasket or combination of gaskets is 0.25mm.

D. Squish Gap

1. The cylinder head squish clearance must be a minimum of 1.05mm.
2. It shall be measured using a digital vernier caliper and 2mm solder wire (tin).
   a) When inserted in the cylinder, the engine shall be rotated only once until the solder is squeezed between the head and piston crown, forming a 'flat' section of solder.
   b) Measure the thickness of the flat section of solder closest to the step formed by the piston ring using the sharp part of the caliper jaws.
   c) This process must be conducted on both the right and left side of the engine in parallel alignment with the gudgeon pin.
3. The average measurement obtained from both tests detailed in points 2 a) and b) above must be a minimum of 1.05mm.

E. Crankshaft

1. It is permissible to hard chrome the crankshaft in the areas highlighted in the homologation documents to restore the surface to original factory specification.

F. Carburettor

1. The carburettor throttle cannot be actuated by electro mechanical means.
2. The only permitted carburettor kits are the Tillotson DG-3HW and RK-6HW carburettor kits.
3. All spare parts for the Tillotson Carburettor are to be genuine Tillotson parts.
4. The entry point to the pulse hole on the back of the HL-398HL carburettor is a non-tech item.
   a) The pulse hole itself, apart for the entry point (which may only be adjusted in accordance with point 4b herein) must be maintained as per its original diameter.
   b) Modification to allow better alignment, such as hand chamfering, drill point chamfering, deburring cutter, end milling, or the permanent re-alignment is permitted.
5. It is permissible to bend the carburettor inlet lever to alter the lever height.
6. It is permitted to mount the carburettor (both the HW33A and the HL-398A) either top side up or upside down to provide easier access to the jets for the Driver.
7. Adjustment of carburettor jet needles must only be done by manually turning the jet needle (or its extension).
   a) It is permitted to fit a second O-Ring on the jet needles to prevent rotation due to vibrations.
   b) It is permitted to fit a pin or screw to the flat portion of the high jet handle for easier identification. The pin/screw may be fitted parallel or perpendicular in respect to the plane of the jet handle as shown in the following examples:

A. Offset pin perpendicular to Jet handle

B. A. Centred pin perpendicular to Jet handle

8. The protrusion on the carburettor top plates may be removed to allow more secure fitment of the airbox rubber as pictured:

A. Top plate showing protrusion

B. Top plate with protrusion removed

G. Induction Silencer

1. Must display the “IAME” markings and may be of any colour.
2. The only permissible rain/dust/dirt guard allowed to be attached to the induction silencer is the genuine IAME rain/dust/dirt guard.
3. It is permissible to drill a maximum 5mm water drain hole in the bottom of the IAME induction silencer.
4. Use of the IAME OEM sponge filter in the inlet silencer is compulsory; both the green and red IAME sponge filters are permitted for use.
5. The external part of the mounting rubber for the airbox may be modified by the removal of a small amount of material in a curved shape; or a notch sufficient to allow clearance for the notched protrusion on the carburettor and provide a more secure fitment of the rubber to the carburettor as pictured:

a) Unmodified Rubber

b) Curve shaped cut

c) Notch cut out

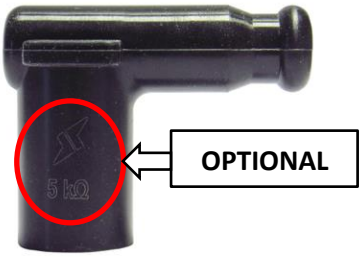
d) Example of fitment

H. Ignition

1. Repair of the wiring loom is permitted.
2. The plastic fittings homologated as components of the electrical loom for the ignition and starter assembly are allowed to be replaced with non-genuine fittings.
3. High tension lead retaining spring may be removed.
4. The woodruff ignition rotor key must be retained and may not be modified.
5. The maximum allowable timing advance is 3.2mm. The timing marks on the rotor and the stator must fully align.
6. Spark plug "crush" washer may be removed.
7. Spark plug cap must be of original manufacturer. Only the PVL 401 222 or the NGK TB05EMA or the Selettra "S" Spark Plug caps are permitted for use.

PVL 401 222 Spark Plug Cap

NGK TB05EMA Spark Plug Cap



Selettra "S" Spark Plug Cap

I. Exhaust

1. Only IAME OEM exhaust gaskets are permitted to be used.
2. All exhaust gases must exit the exhaust system through the muffler end cap.
3. When a restrictor is fitted, all exhaust gases must pass through the internal hole of the restrictor.
4. A minimum of one (1) and maximum of two (2) exhaust gaskets are required to be properly fitted to the engine.
5. The mating surfaces between the cylinder/manifold and manifold/muffler must be sealed to prevent any leakage of exhaust gas. It is recommended that High Temperature RTV Silicone is applied between the surfaces to ensure that a gastight seal is created and maintained at all times.
6. An O2 probe/fitting is allowed to be fitted to the muffler as per the diagram in the homologation document. Both locations may have a fitting installed simultaneously but only one (1) may be fitted with an O2 probe. Fittings without a sensor installed must be sealed with a blanking plug.

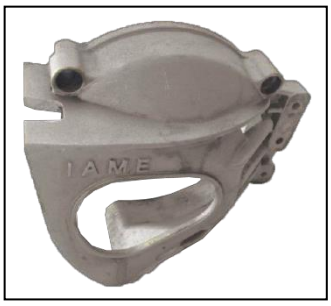
J. Oil Seal

1. It is permitted to place a small notch into the oil seal (as shown photo 2 below) to allow a more direct oil flow from the orifice in the crankcase.

K. Clutch Guard

1. The top rear of the Clutch Guard edge may be removed to a maximum of 25mm from the back edge of the original Clutch Cover to increase clearance for the chain as pictured. The modifications must be uniform, smooth and must not have any sharp edges.

Alternative 1



Alternative 2

L. Non-Technical Items

1. Unless otherwise specified, non-tech items are to be of the same specification as the original item.
2. No alteration from the original manufacturer's specifications is permitted to fit a non-tech item.
3. Non-tech items for the Engine include; spark plug (including the crush washer), carburettor gasket between the carburettor and manifold, plastic fittings on the electrical looms for the ignition and starter assembly, battery and stop/start switches, carburettor locating sleeve and fastening nuts, carburettor inlet spring, high tension lead retaining spring.
4. Stickers' that may be removed when requested by the technical inspector are allowed on the engine or induction silencer.
5. Engraving, stamping a name or marking an engine to allow you to identify your engine is permitted. Any such engraving, stamping or marking must not partially or wholly obscure the essential homologation identification markings on the Engine and its ancillary components.

UPDATE LOG

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1 June 2021	New Style Inlet Silencer Tube	16
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17 January 2023	Reduced tolerance on cylinder liner height	10
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17 January 2023	New Type 3 D22 Restrictor	15
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LIST OF AVAILABLE CHECKING TOOLS

DESCRIPTION OF TEMPLATE	CODE
HEAD DOME SHAPE CONTROL TEMPLATE	ATT.063 / 1
HEAD VOLUME CONTROL TEMPLATE "VOLUMETER"	ATT.063 / 2
0,20mm THICKNESS GAUGE FOR TIMING CHECKING	10194
"NO GO" GAUGE CHECKING INLET, EXHAUST AND TRANSFERS WIDTH	ATT.063 / 3
DOME SHAPE AND PISTON HEIGHT CHECKING TEMPLATE	ATT.063 / 4
"NO GO" GAUGE CHECKING EXHAUST AND TRASFERS HEIGHT	ATT.063 / 5
SHAPE CONTROL TOOL FOR EXHAUST MANIFOLD “NO GO” GAUGE RESTR. Ø19mm TYPE 1	ATT.063 / 6
SHAPE CONTROL TOOL FOR EXHAUST MANIFOLD “NO GO” GAUGE RESTR. Ø19mm TYPE 2	ATT.063 / 7
SHAPE CONTROL TOOL FOR EXHAUST MANIFOLD “NO GO” GAUGE RESTR. Ø22mm TYPE 3	ATT.063-15
"NO GO" GAUGE FOR CLUTCH DRUM INNER DIAMETER CHECKING	ATT.047 / 4
"NO GO" GAUGE FOR CARBURETTOR HOLES DIAMETER HL398A	ATT.047 / 16
"NO GO" GAUGE FOR MAX DIAMETER VENTURI CARBURETTOR OUTLET HL398A	ATT.047 / 19
"NO GO" GAUGE FOR MAX DIAMETER VENTURI CARBURETTOR INLET HL398A	ATT.047 / 20
SHAPE CONTROL TOOL FOR CARBURETTOR INLET PROFILE HL398A	ATT.047 / 21
SHAPE CONTROL TOOL FOR CARBURETTOR INLET PROFILE HW-33A AND NO-GO OUTLET	ATT.063 / 8
"NO GO" GAUGE FOR MAX VENTURI CARBURETTOR HW-33A	ATT.063 / 9
"NO GO" GAUGE FOR CARBURETTOR HOLES DIAMETER HW-33A	ATT.047 / 5D
CHECKING TOOL ATOMIZER HEIGHT MINIMUM	ATT.063 / 13
CHECKING TOOL ATOMIZER HEIGHT MAXIMUM	ATT.063 / 14
TOOL FOR CHECKING ATOMIZER HOLES DIMENSIONS	ATT.063 / 19
IGNITION ROTOR MARKING POSITION TEMPLATE	ATT.063 / 10
CYLINDER DUCTS CONTROL TEMPLATE	ATT.063 / CL
REED VALVE PLANE CONTROL TEMPLATE	ATT.035 / 3A