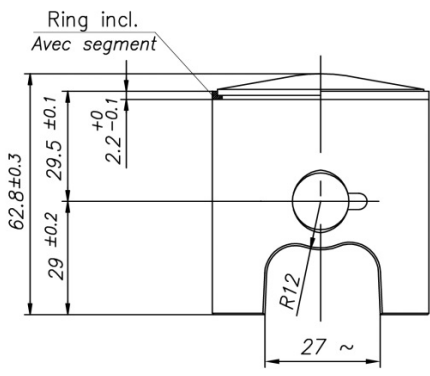
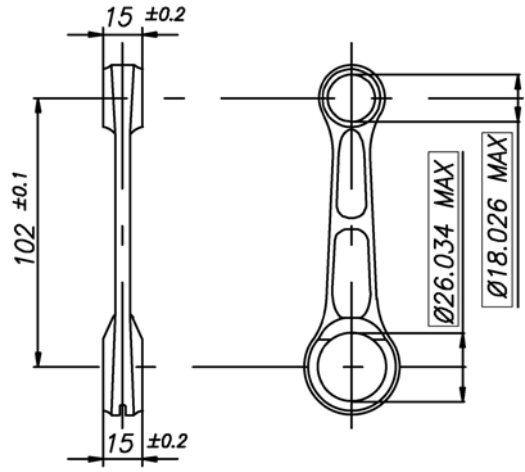
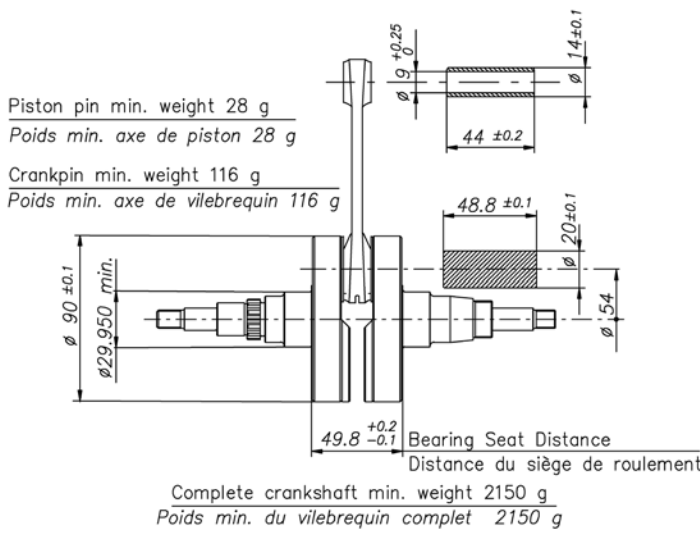
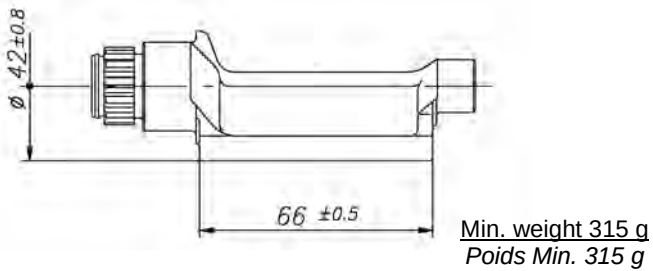
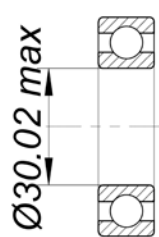
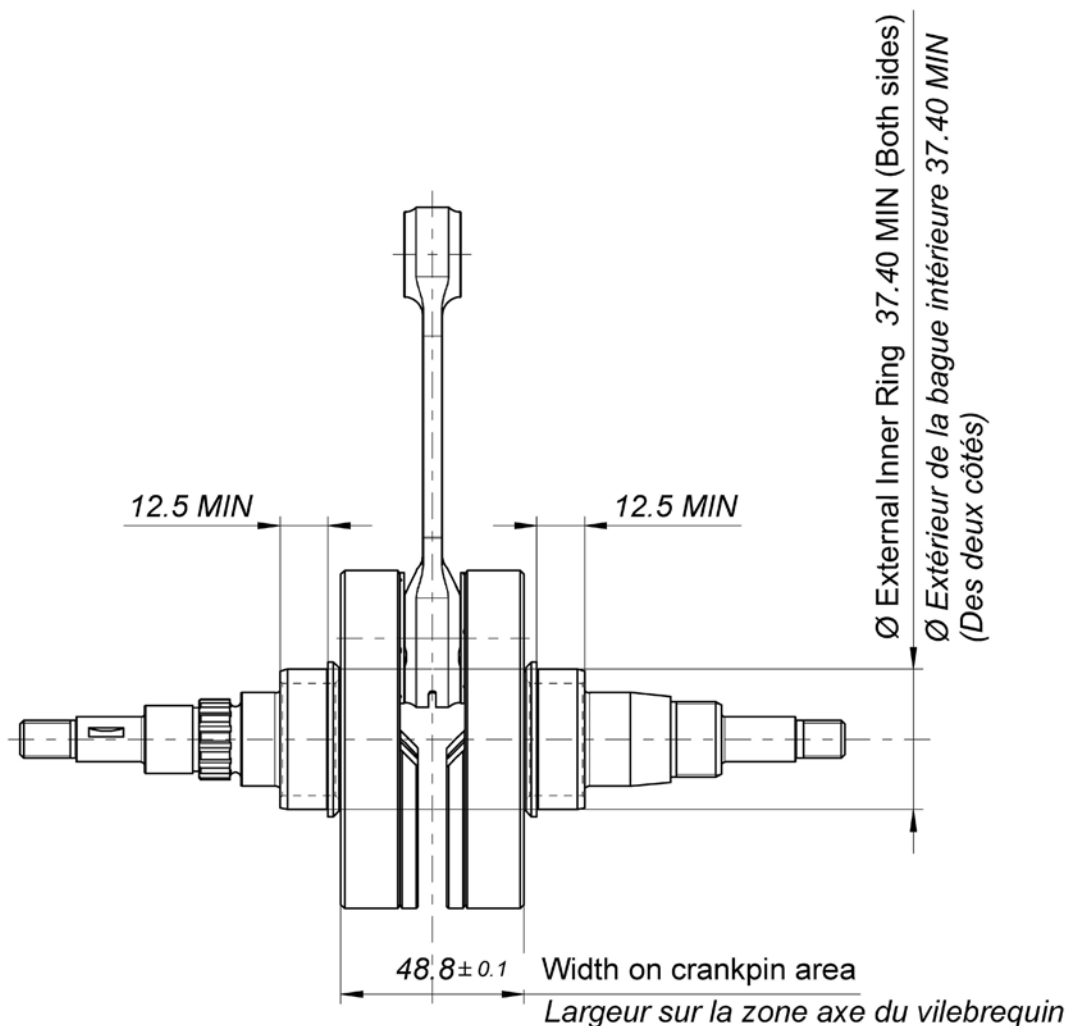


X30 125cc RL-C TAG

		FEATURES - CARACTERISTIQUES	
		Cylinder volume <i>Volume du cylindre</i>	123.67 cm ³
		Bore <i>Alésage</i>	54 mm
		Max. bore <i>Alésage max.</i>	54.28 mm
		Stroke <i>Course</i>	54 mm
		Cooling system <i>Système de refroidissement</i>	Water <i>À Eau</i>
		Inlet system <i>Système d' admission</i>	Reed valve <i>À clapets</i>
		Cylinder / crankcase transfers n° <i>N° de canaux cylindre / carter</i>	3 / 3
Carburetor Tillotson <i>Carburateur Tillotson</i>	HW-27A (Ø27 Venturi)	Inlet / exhaust ports number <i>N° lumières admiss. / échapp.</i>	3 / 3
Number of piston rings <i>Nombre de segments</i>	1	Combustion chamber shape <i>Forme chambre de combustion</i>	Spherical <i>Sphérique</i>
Big end conr. bearing diam. <i>Diamètre roulement tête de bielle</i>	20x26x15	Selettra or PVL ignition <i>Allumage Selettra ou PVL</i>	Digital
Crankshaft bearing diam. <i>Diamètre roulement du vilebrequin</i>	30x62x16	Distance between conrod centers <i>Longueur (entraxe) de la bielle</i>	102 mm
Small end conr. bearing diam. <i>Diamètre roulement pied de bielle</i>	14x18x17.5	RPM limiter <i>Limiteur de régime</i>	Yes <i>Oui</i>
Balancing shaft <i>Arbre d'équilibrage</i>	Yes <i>Oui</i>	Electric starter <i>Démarrreur électrique</i>	Yes <i>Oui</i>

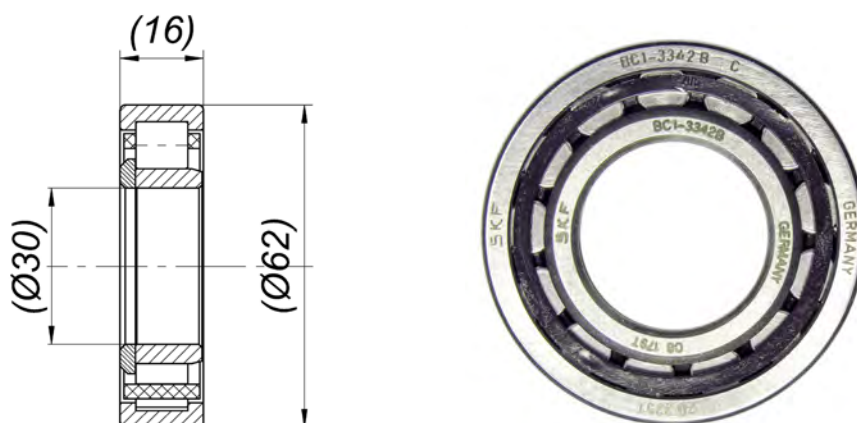
DESCRIPTION OF THE MATERIAL DESCRIPTION DES MATERIAUX		PISTON
Conrod material <i>Matériau de la bielle</i>	Steel <i>Acier</i>	 Piston min. weight (ring incl.) 128 g Poids min. piston (avec segment) 128g
Crankshaft material <i>Matériau du vilebrequin</i>	Steel <i>Acier</i>	
Balancing shaft material <i>Matériau de l'arbre d'équilibrage</i>	Steel <i>Acier</i>	
Gears material <i>Matériau des engrenages</i>	Steel <i>Acier</i>	
Starter ring material <i>Matériau de la couronne démarreur</i>	Steel <i>Acier</i>	
Head material <i>Matériau de la culasse</i>	Aluminium	
Cylinder material <i>Matériau du cylindre</i>	Aluminium	DISTANCE BETWEEN CONROD CENTERS <i>ENTRAXE DE LA BIELLE</i>  Min. weight 110 g Poids min. 110 g
Liner material <i>Matériau de la chemise</i>	Iron <i>Fonte</i>	
Crankcase material <i>Matériau du carter</i>	Aluminium	
Piston material <i>Matériau du piston</i>	Aluminium	
Piston rings material <i>Matériau des segments</i>	Iron <i>Fonte</i>	
Exhaust muffler material <i>Matériau du pot d'échappement</i>	Sheet-steel <i>Tôle acier</i>	
Ball-bearings <i>Roulements</i>	Type 6206	
CRANKSHAFT - VILEBREQUIN		BALANCING SHAFT ARBRE D'EQUILIBRAGE
 Piston pin min. weight 28 g Poids min. axe de piston 28 g Crankpin min. weight 116 g Poids min. axe de vilebrequin 116 g Complete crankshaft min. weight 2150 g Poids min. du vilebrequin complet 2150 g		 Min. weight 315 g Poids Min. 315 g
		CRANKSHAFT BALL BEARINGS <i>ROULEMENTS À BILLES DU VILEBREQUIN</i>  Ø30.02 max

DIMENSIONS OF ALTERNATIVE CRANKSHAFT WITH ROLLER MAIN BEARINGS
DIMENSIONS DU VILEBREQUIN ALTERNATIF AVEC ROULEMENTS A ROULEAUX

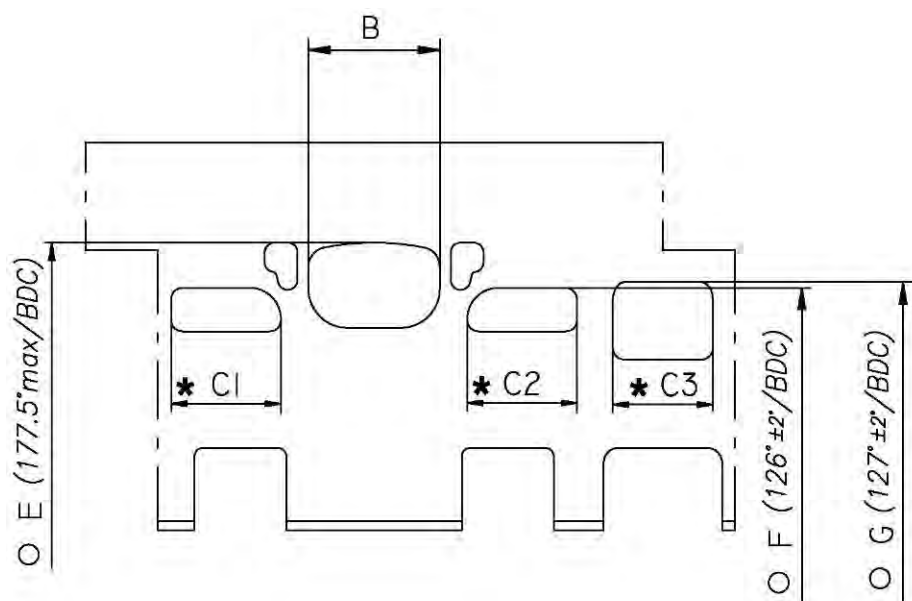


Crankshaft complete min. Weight 2220 g
Poids min. du vilebrequin

ROLLER MAIN BEARING
ROULEMENTS À ROULEAUX DU VILEBREQUIN



CYLINDER DEVELOPMENT - DEVELOPPEMENT DU CYLINDRE

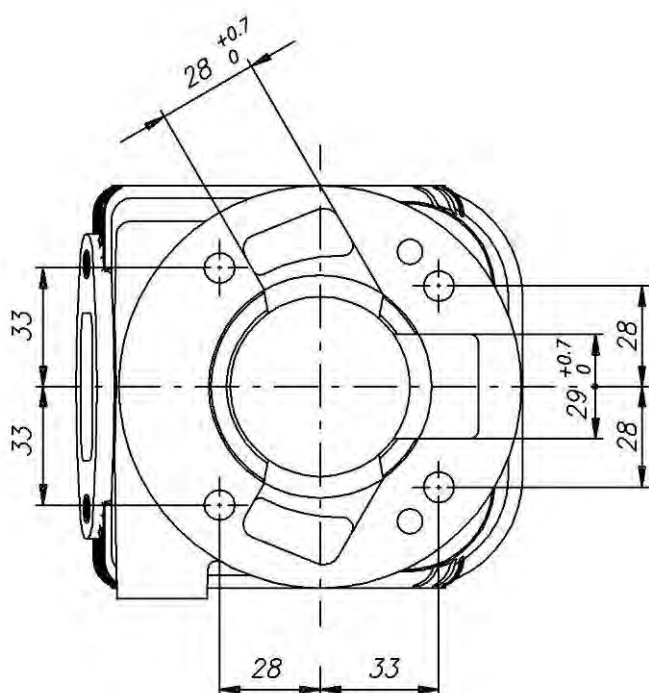


B	$\leq 36.5 \text{ mm}$
C1 = C2	$\leq 30 \text{ mm}$
C3	$\leq 28.5 \text{ mm}$
E	177.5° max
F	$126^\circ \pm 2^\circ$
G	$127^\circ \pm 2^\circ$

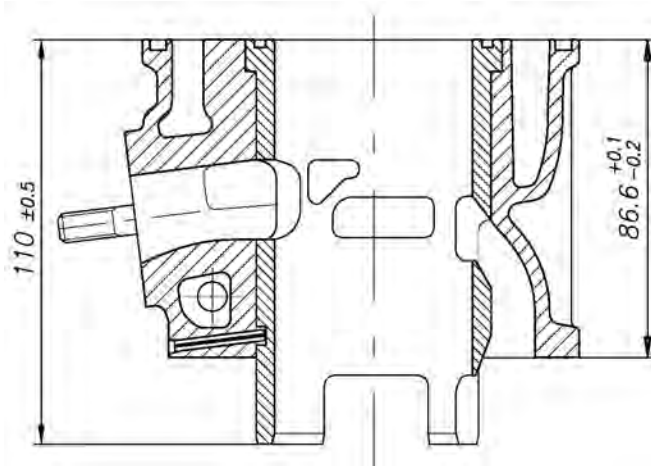
* **CHORDAL READING**
LECTURE CORDALE

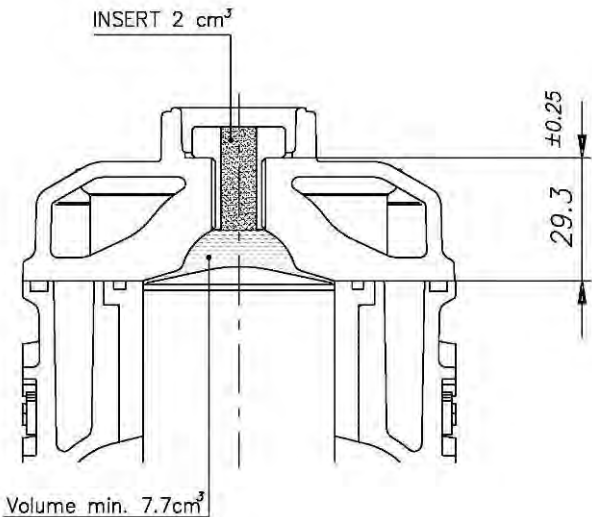
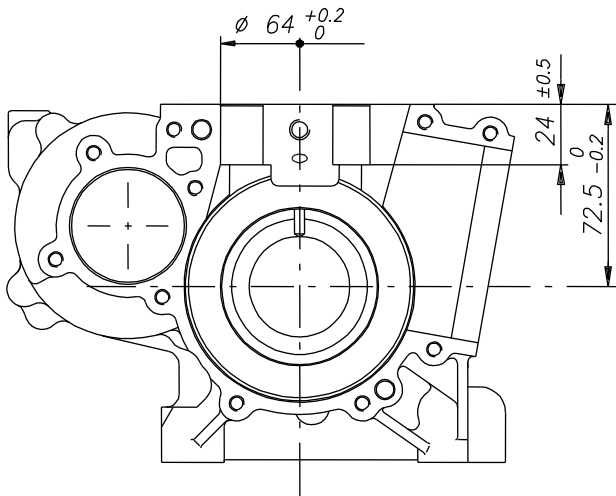
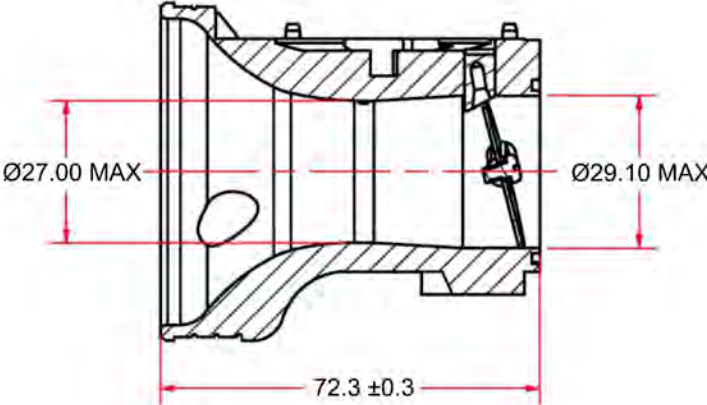
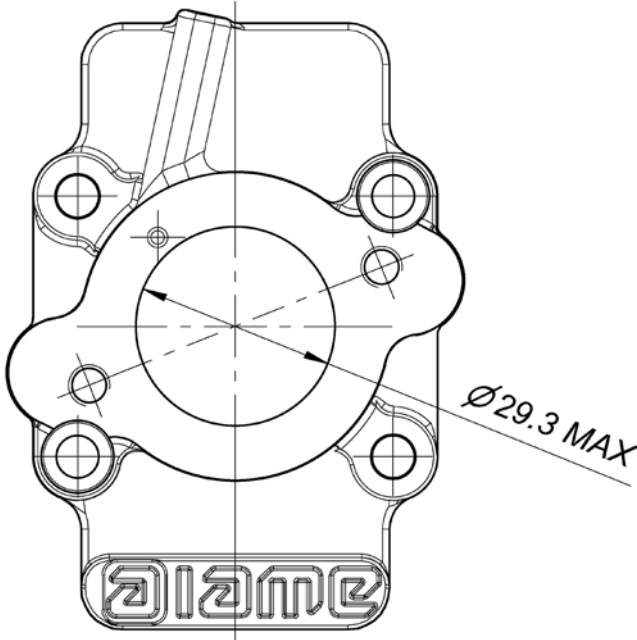
○ **ANGULAR READING BY INSERTING A 0.2x5 mm GAUGE**
LECTURE ANGULAIRE PAR INSERTION D'UNE CALE DE 0.2x5 mm

CYLINDER BASE VIEW
VUE DE LA BASE DU CYLINDRE

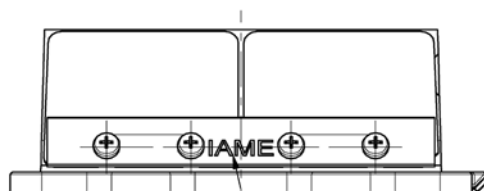
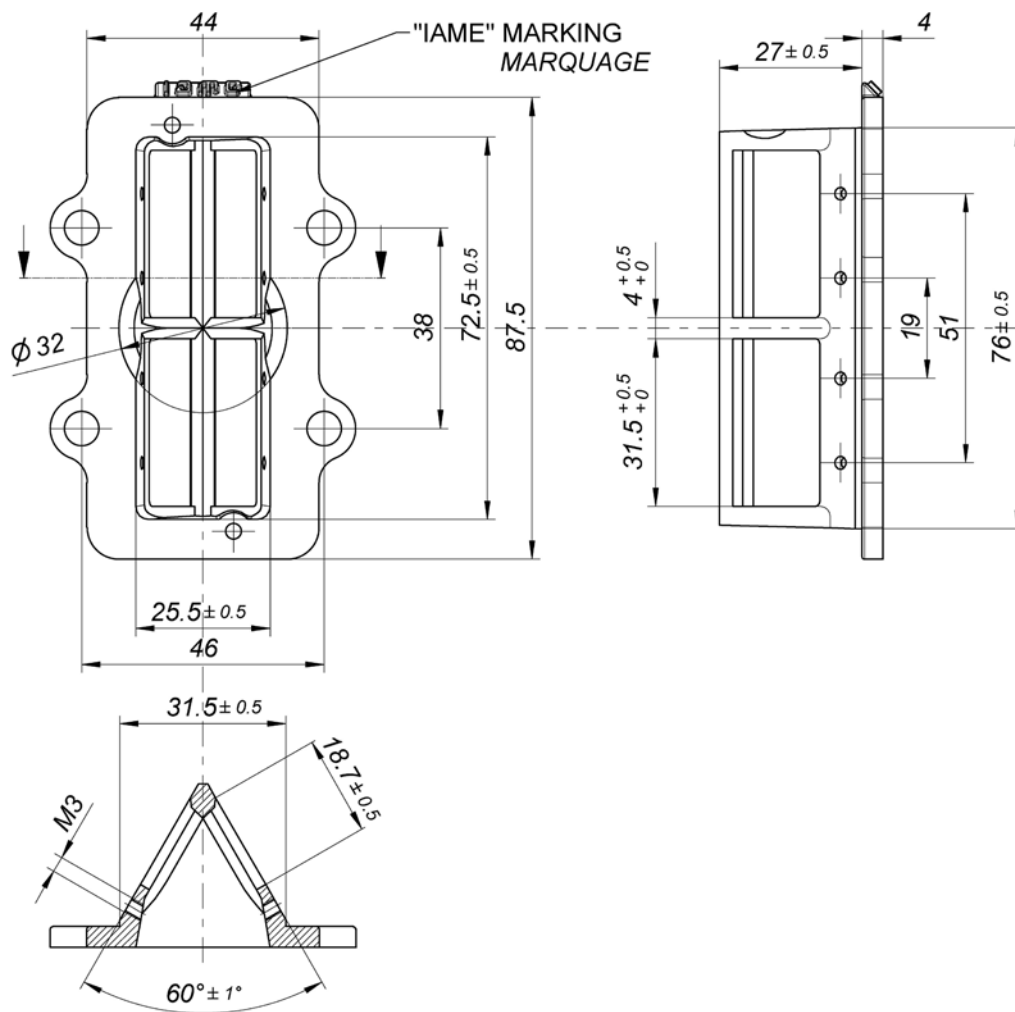


CYLINDER CROSS SECTION VIEW
VUE EN SECTION DU CYLINDRE

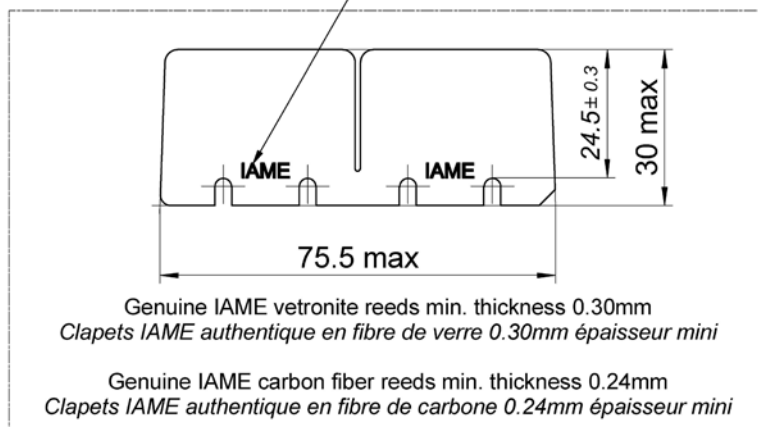


COMBUSTION CHAMBER VIEW VUE DE LA CHAMBRE DE COMBUSTION  Volume min. 7.7cm³ COMBUSTION CHAMBER VOLUME TOT. = 9.7 cm³ min. VOLUME CHAMBRE COMBUSTION TOT. = 9.7 cm³ min. ATT. : SQUISH MIN. = 0.90 mm (measured with Ø1.5mm TIN - mesurée avec de l'étain Ø1.5mm)	CRANKCASE INSIDE VIEW VUE A' L' INTERIEUR DU CARTER 
VENTURI CARB. DIMENSIONS DIMENSIONS DU VENTURI DU CARBURATEUR 	INLET CONVEYOR DIMENSIONS CONVOYEUR D'ADMISSION 

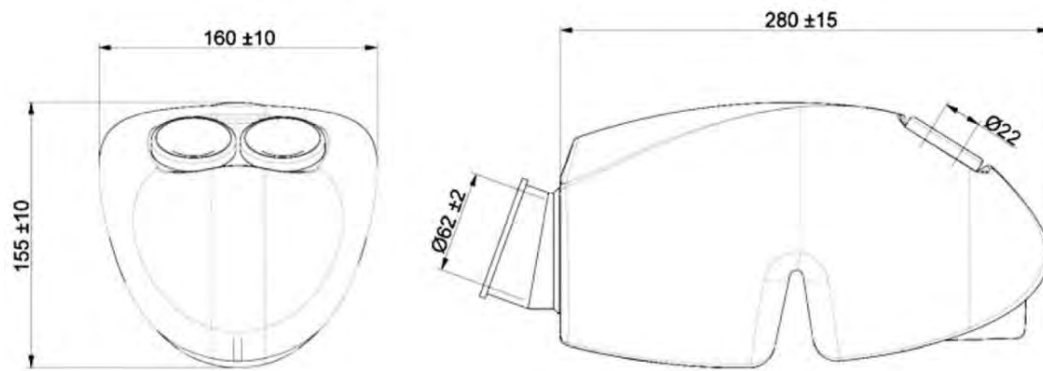
REED VALVE - DIMENSIONS AND MARKING BOÎTE À CLAPETS - DIMENSIONS ET MARQUAGE



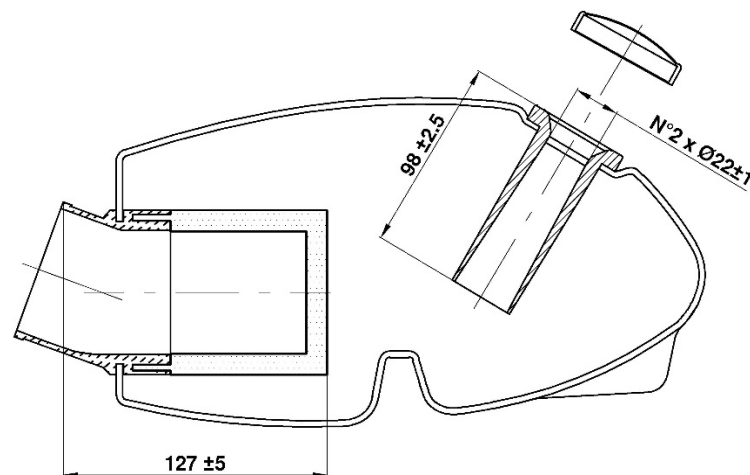
"IAME"
MARKING / MARQUAGE



INLET SILENCER – DRAWING
 DESSIN DU SILENCIEUX D'ASPIRATION



WITH SPONGE AIR FILTER
AVEC MANCHON COMPLET ET FILTRE À AIR

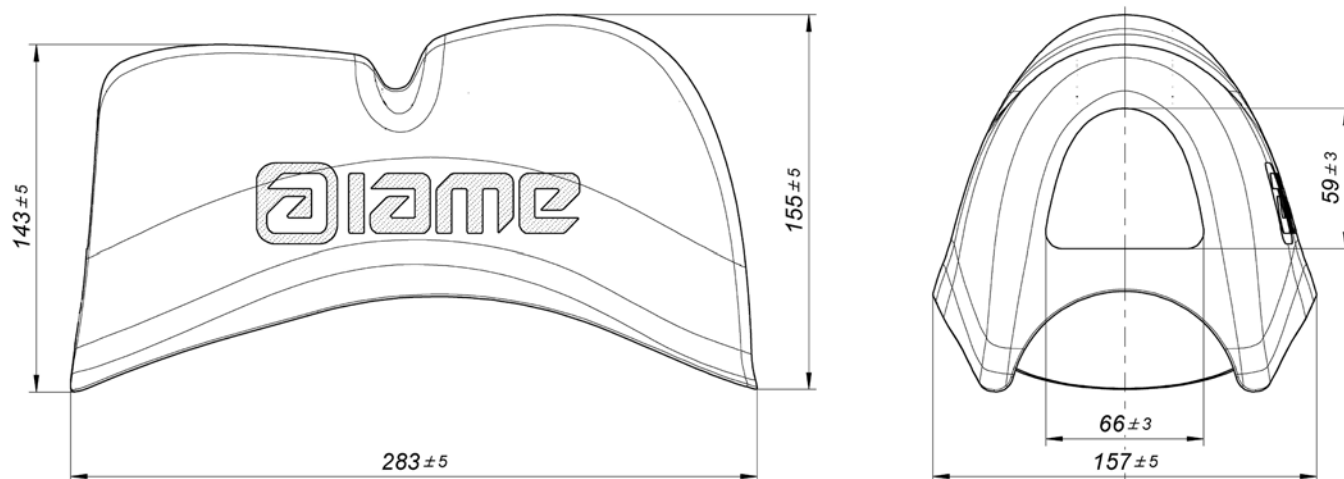


INLET SILENCER - PHOTO
 PHOTO - SILENCIEUX D'ASPIRATION



RAIN COVER INLET SILENCER – DRAWING
DESSIN DU COUVERTURE POUR LA PLUIE DU SILENCIEUX D'ASPIRATION

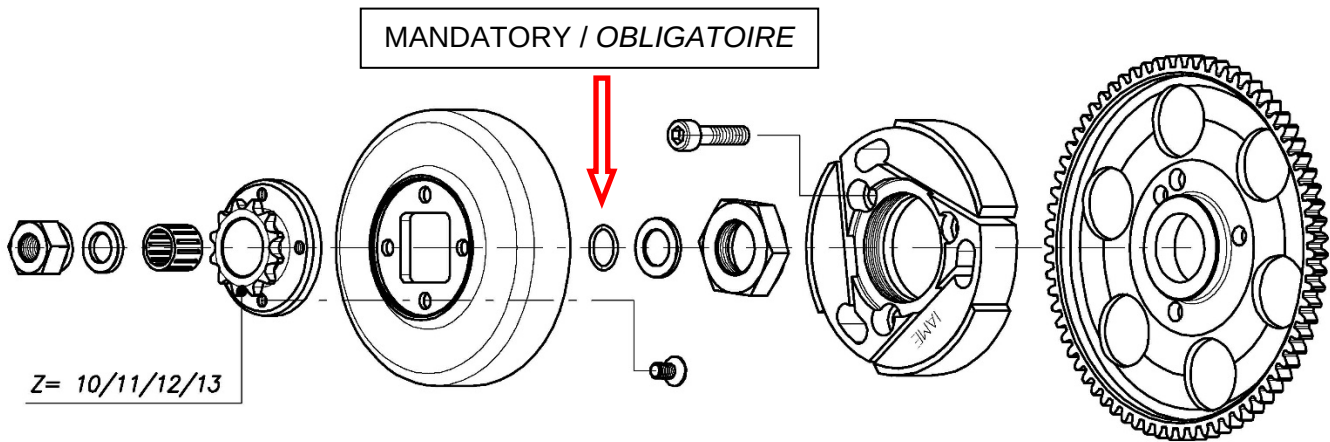
Optional 2022, mandatory 2023
lame marking not mandatory.



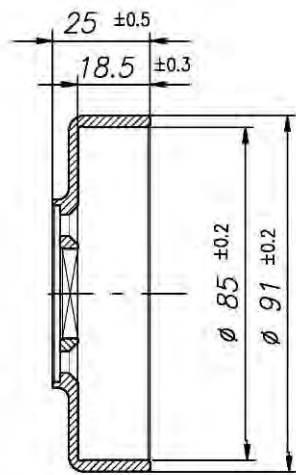
RAIN COVER INLET SILENCER - PHOTO
PHOTO - COUVERTURE POUR LA PLUIE DU SILENCIEUX D'ASPIRATION



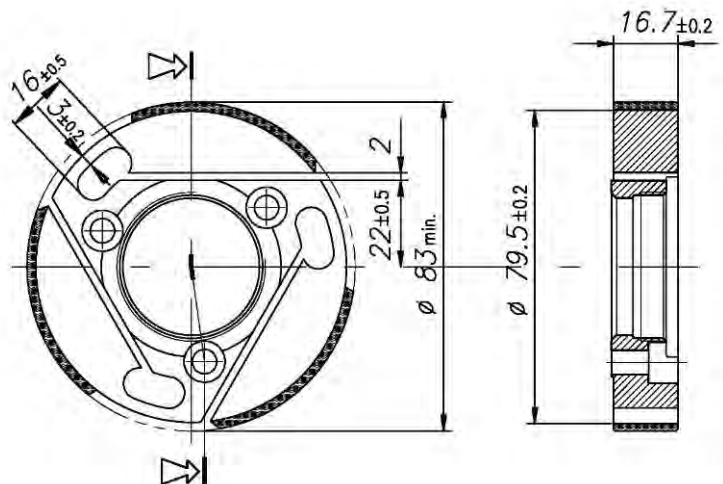
DESCRIPTION OF THE CLUTCH - DESCRIPTION DE L'EMBRAYAGE



COMPONENTS OF THE CLUTCH – COMPOSANTS DE L' EMBRAYAGE

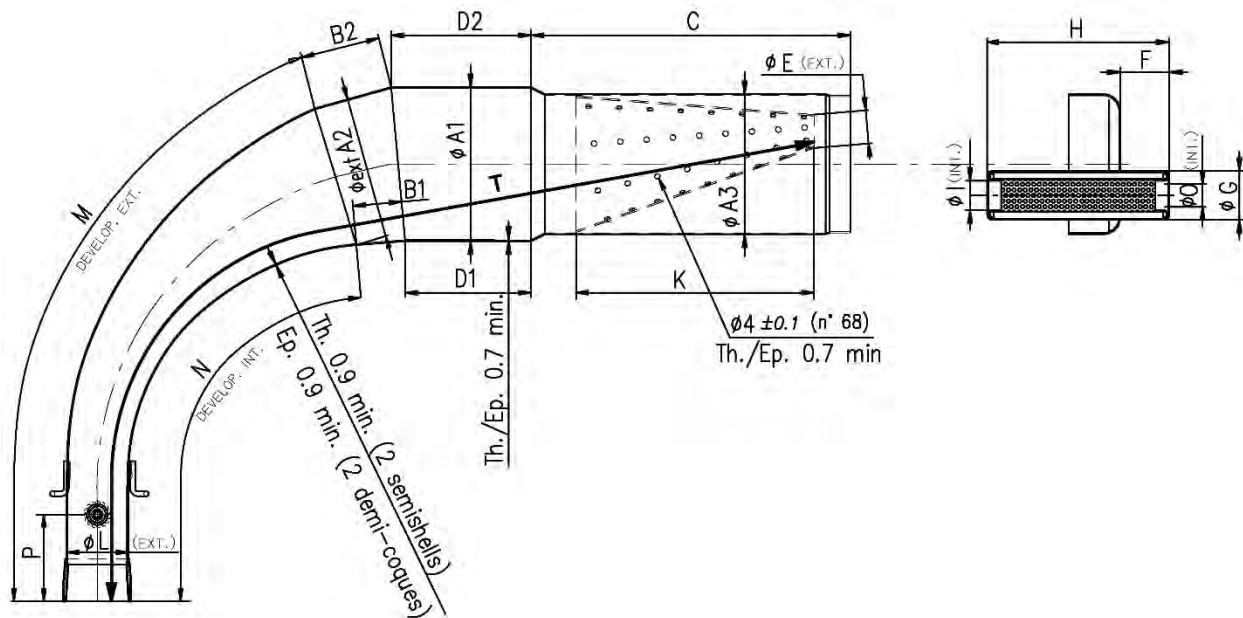


Min. weight 225 g
Poids min. 225g



Min. weight 375 g
Poids min. 375g

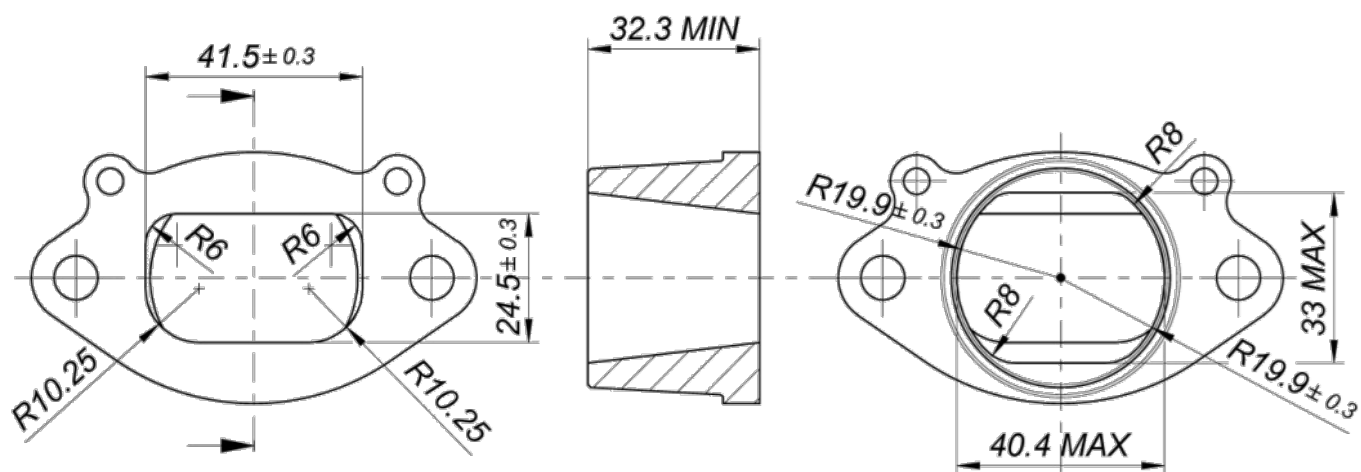
EXHAUST MUFFLER VIEW AND DIMENSIONS
VUE ET DIMENSIONS DU SILENCIEUX D'ÉCHAPPEMENT



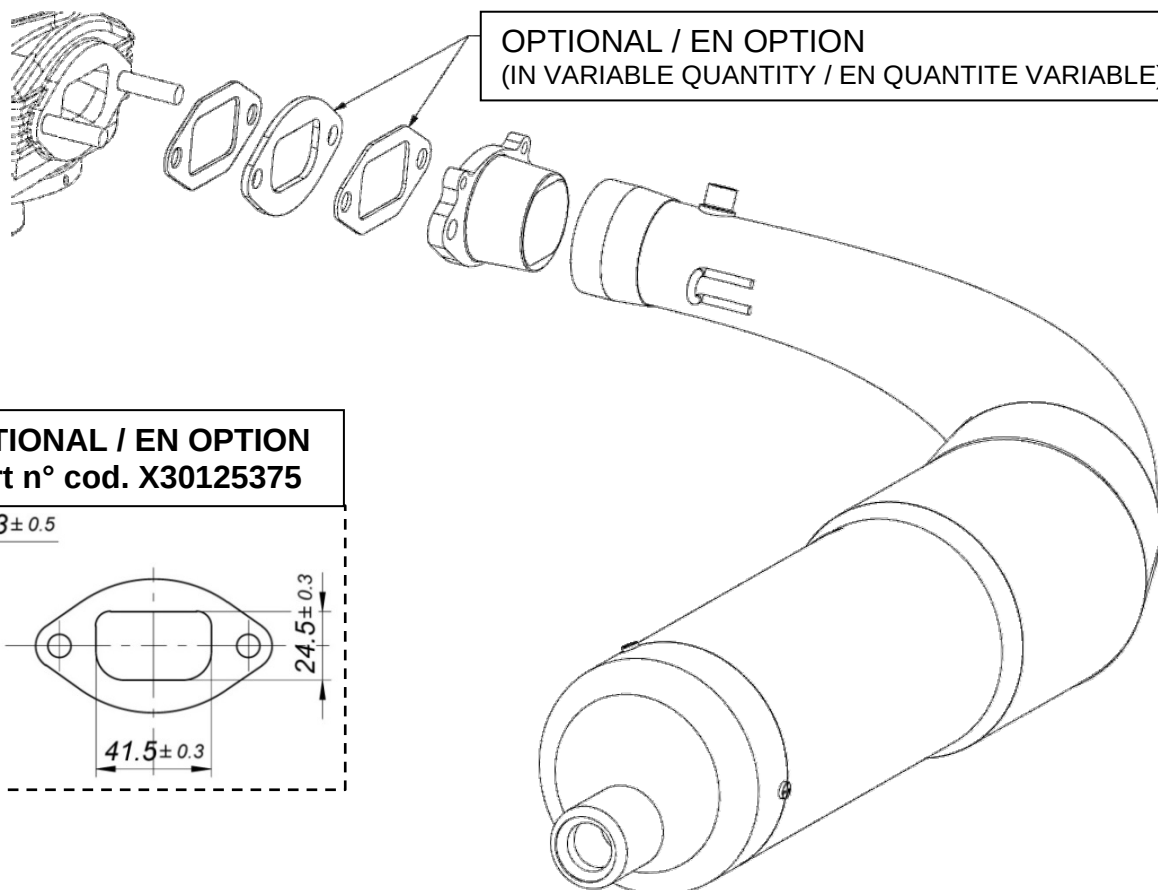
A1: <u>110 ±1.5</u>	B1: <u>59 ±3</u>	D1: <u>89.5 ±3</u>	F: <u>36 ±2</u>	I: <u>21 ±1</u>	M: <u>435 ±3</u>	P: <u>50 ±10</u>
A2: <u>102 ±1.5</u>	B2: <u>59 ±3</u>	D2: <u>109 ±3</u>	G: <u>35 ±1</u>	K: <u>170 ±3</u>	N: <u>340 ±3</u>	T: <u>690 ±5</u>
A3: <u>100 ±1.5</u>	C: <u>219 ±3</u>	E: <u>23 ±2</u>	H: <u>132 ±2</u>	L: <u>42.5 ±1.5</u>	O: <u>21 ±1</u>	

Min. Weight 1,78 kg
Poids min. 1,78 kg

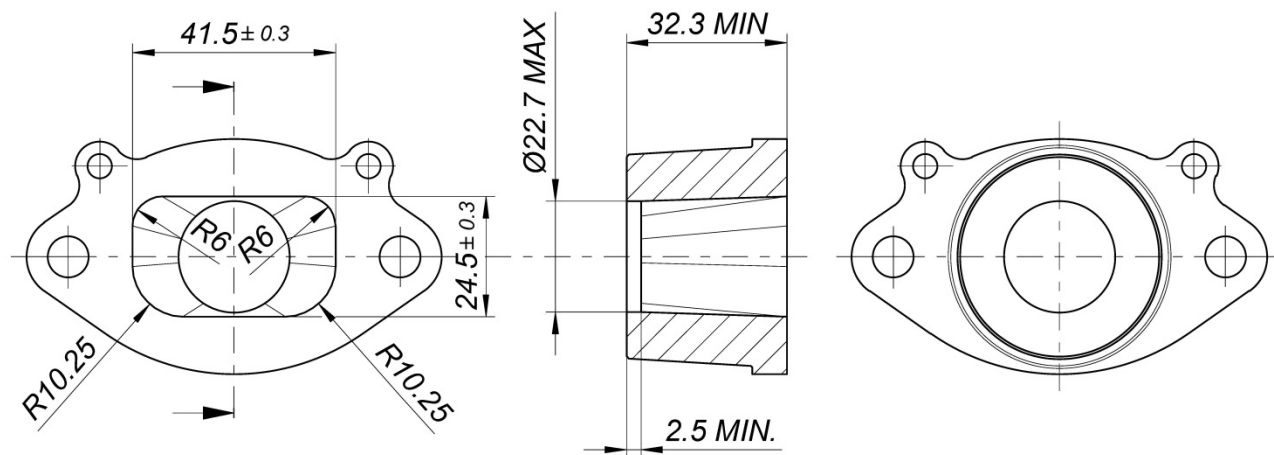
SENIOR EXHAUST FITTING
RACCORD D'ÉCHAPPEMENT SENIOR



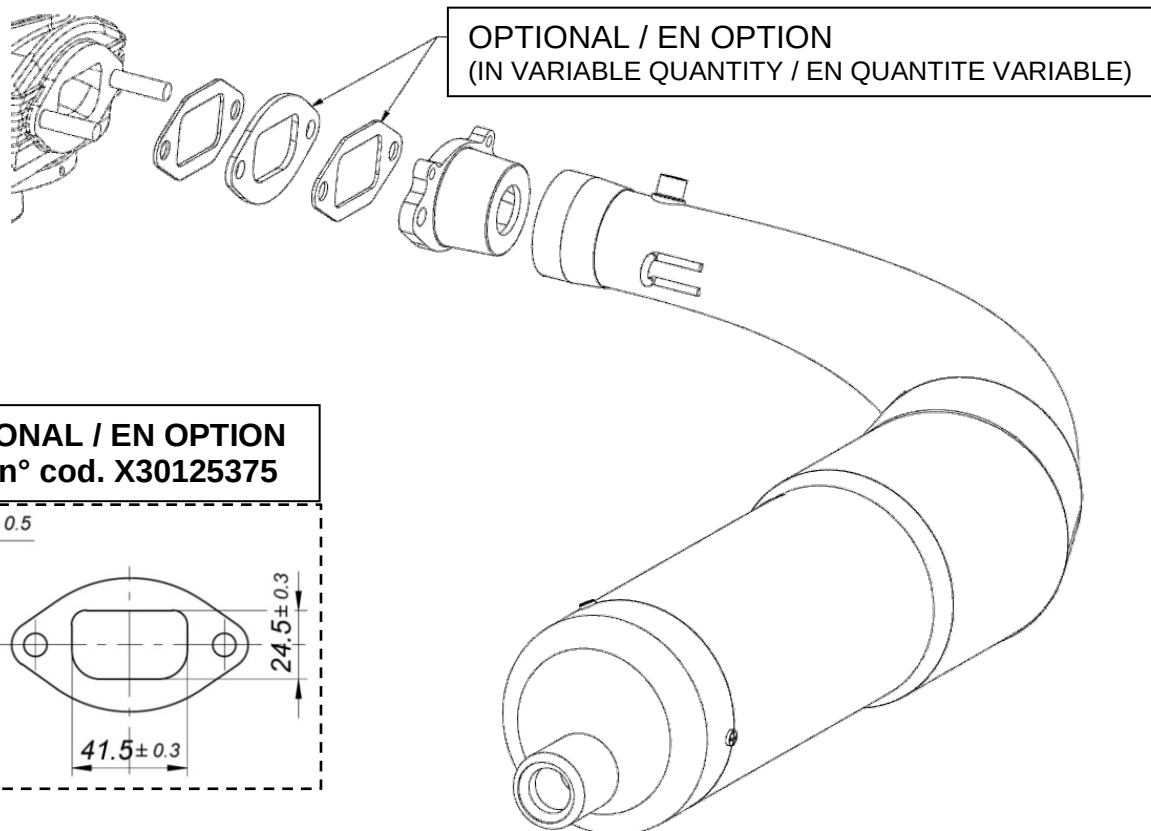
SENIOR EXHAUST INSTALLATION
INSTALLATION DE L'ÉCHAPPEMENT SENIOR



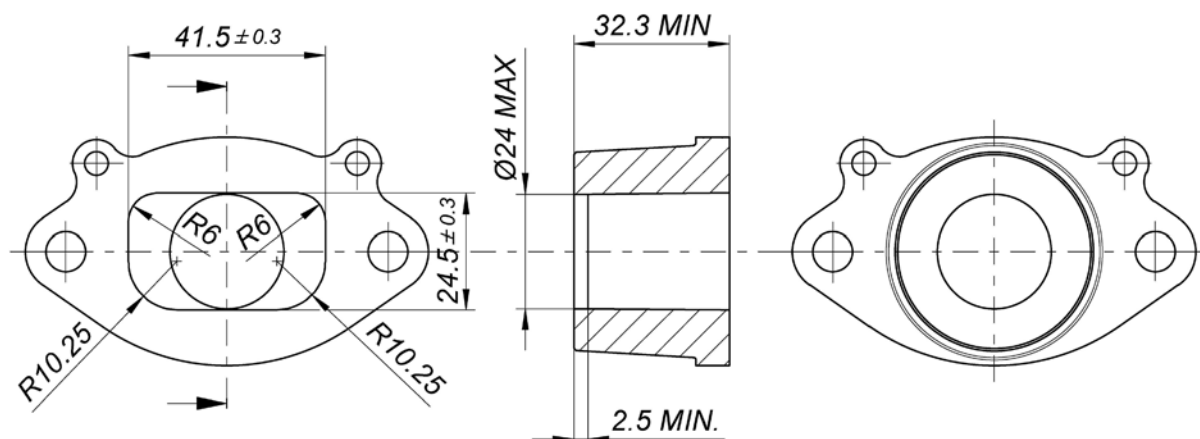
**JUNIOR EXHAUST FITTING
RACCORD D'ÉCHAPPEMENT JUNIOR**



**JUNIOR EXHAUST INSTALLATION
INSTALLATION DE L'ÉCHAPPEMENT JUNIOR**



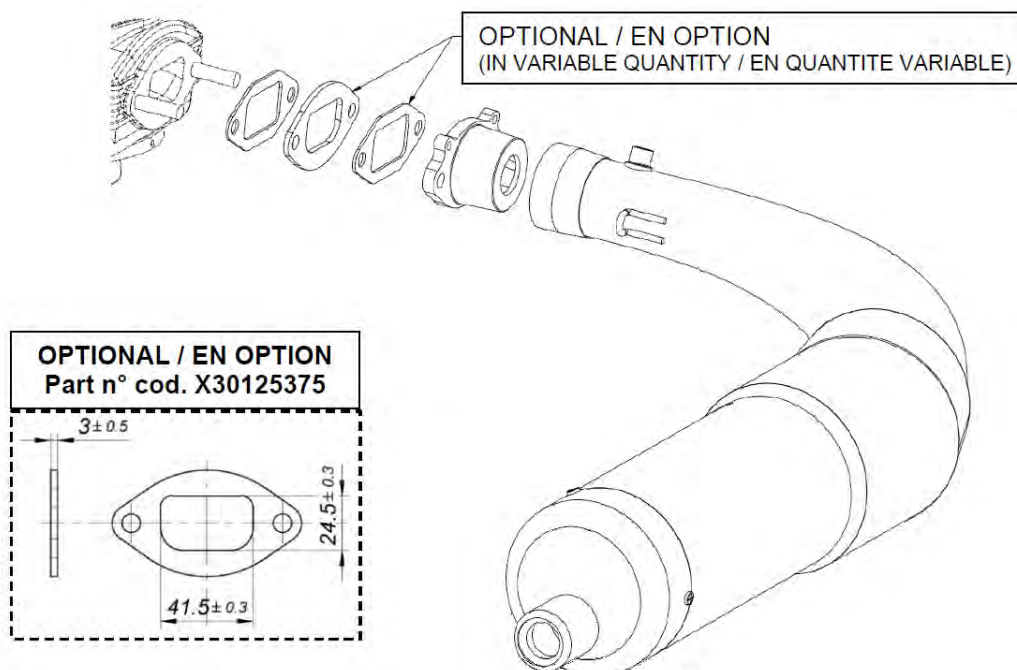
EXHAUST FITTING WITH Ø24 RESTRICTOR
RACCORD D'ÉCHAPPEMENT AVEC RESTRICTEUR Ø24



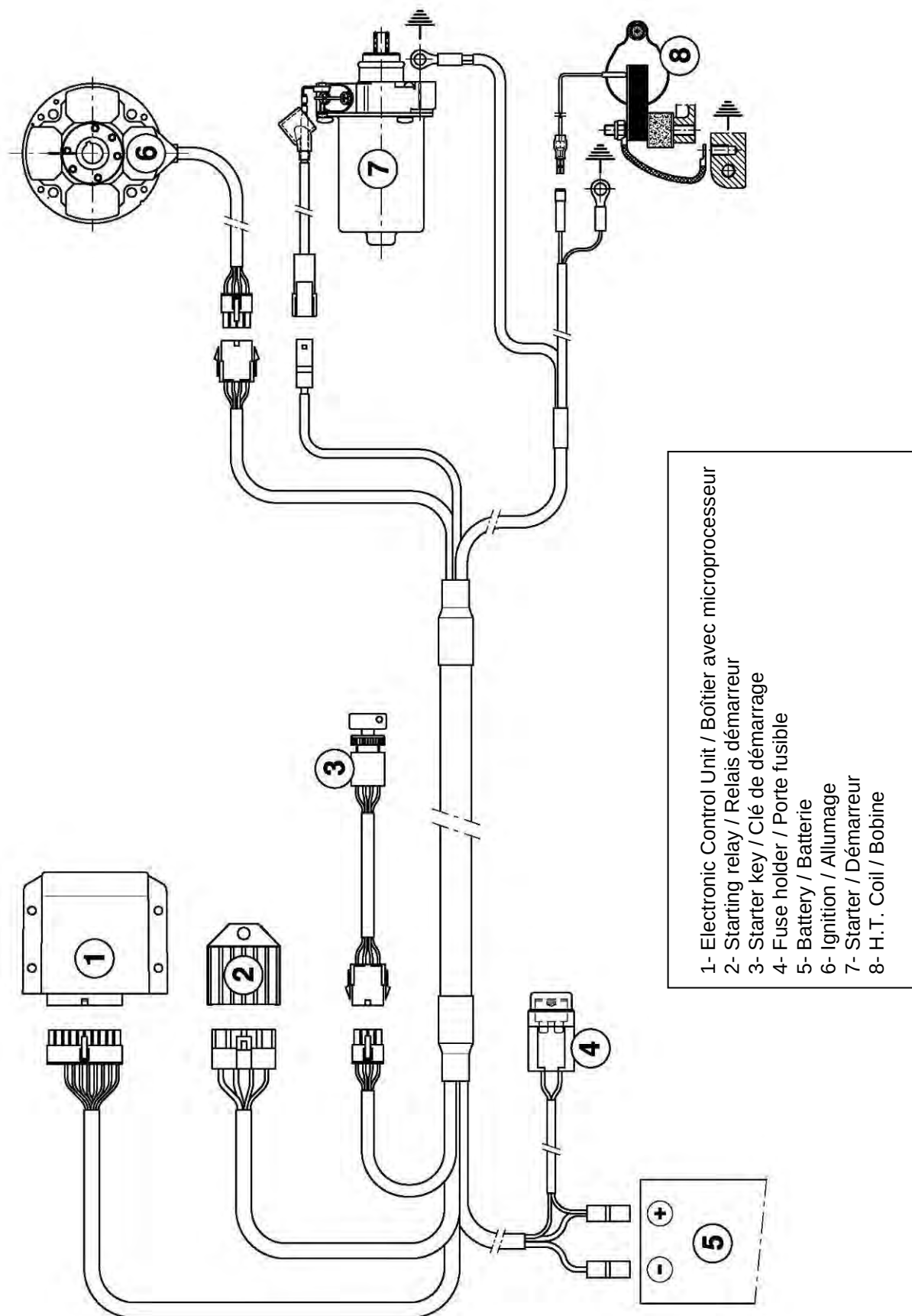
EXHAUST FITTING WITH Ø24 RESTRICTOR MARKING
MARQUAGE D'IDENTIFICATION DU RACCORD D'ÉCHAPPEMENT AVEC RESTR. Ø24



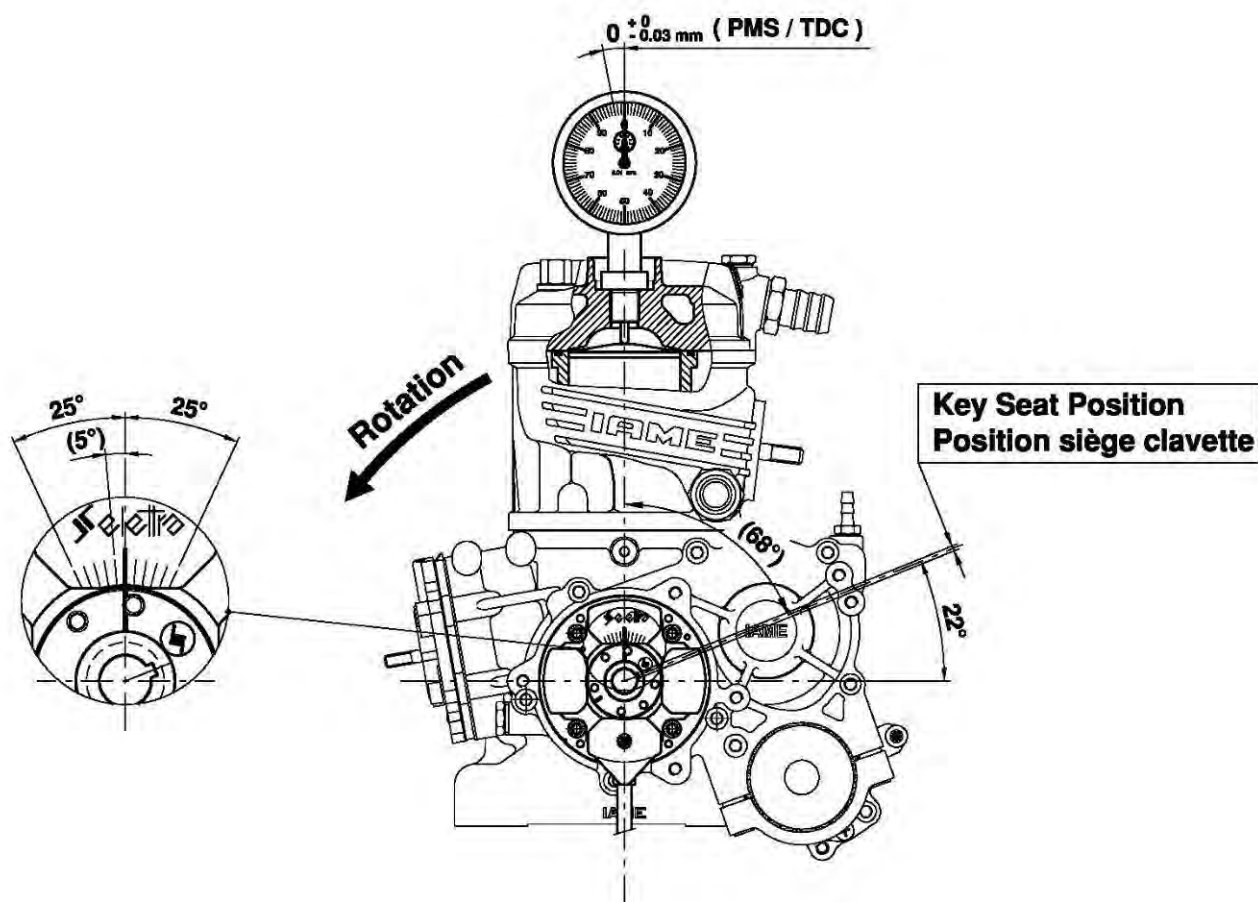
EXHAUST WITH Ø24 RESTRICTOR INSTALLATION
INSTALLATION DE L'ÉCHAPPEMENT AVEC RESTRICTEUR Ø24



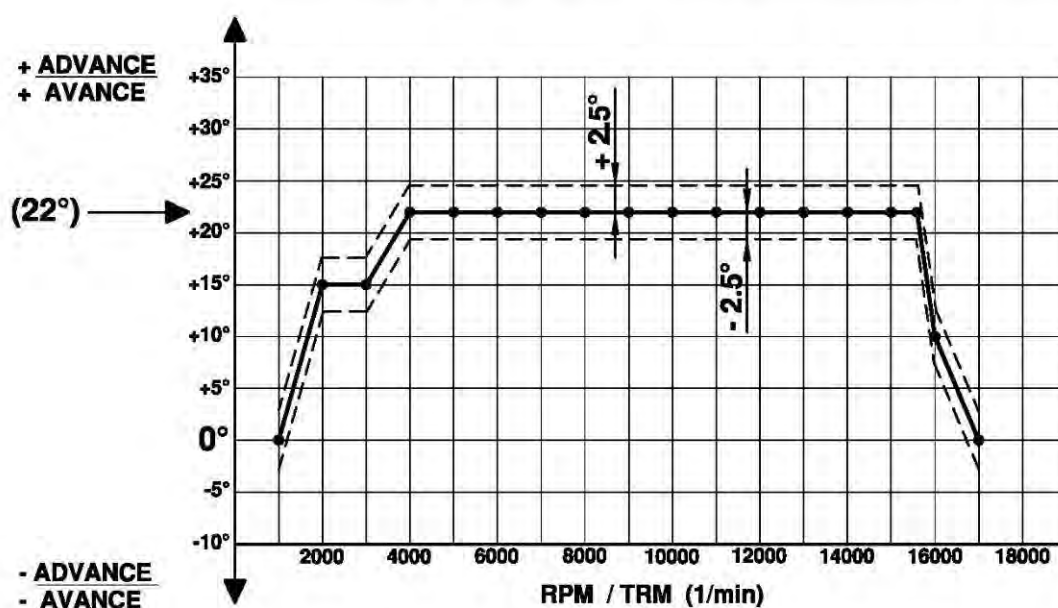
WIRING DIAGRAM (SELETTRA DIGITAL "K" IGNITION)
 SCHEMA CIRCUIT ELECTRIQUE (ALLUMAGE SELETTRA DIGITAL "K")



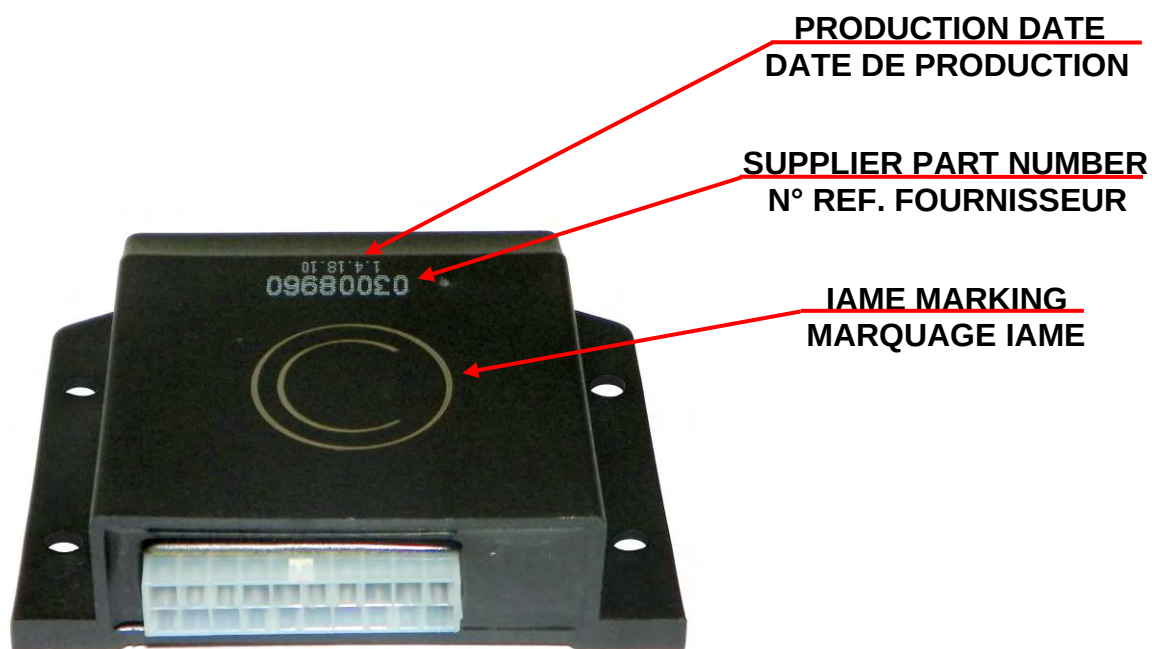
SCHEME FOR ADVANCE CONTROL SCHEMA PUOR CONTROLE DE L'AVANCE



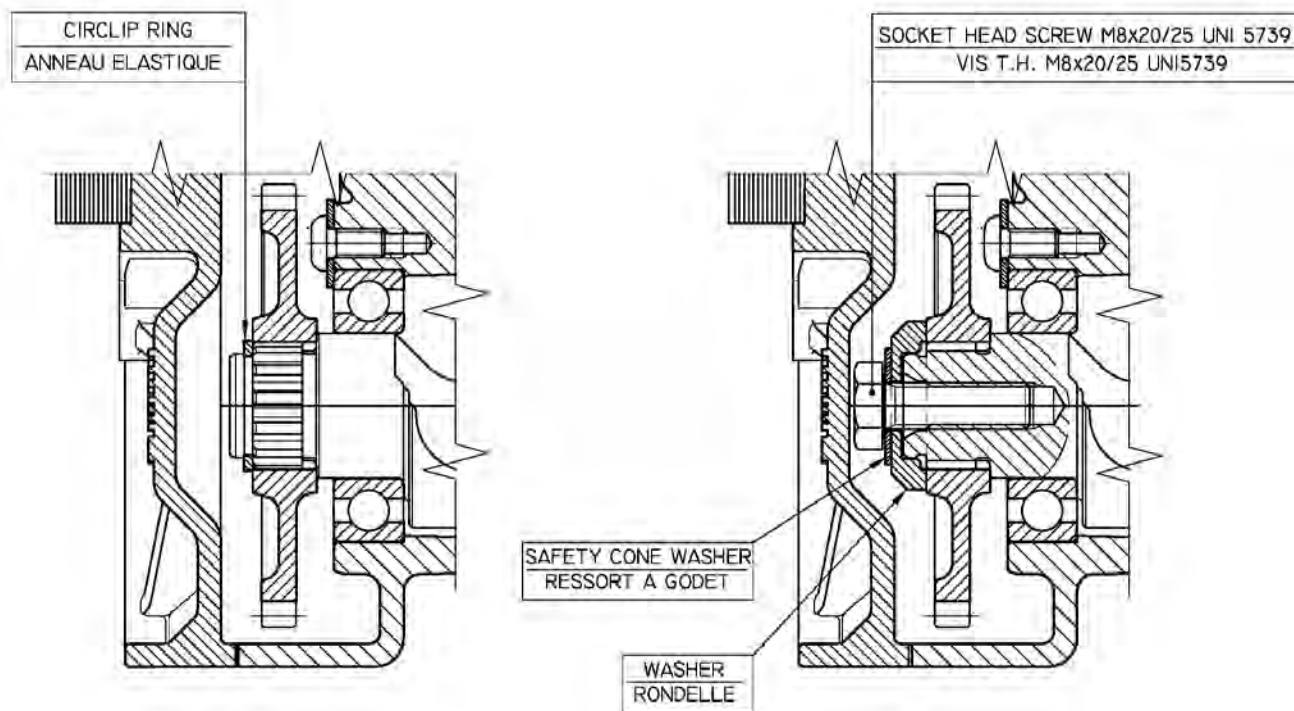
ADVANCE CURVE GRAPHS / GRAPHIQUES DE LA COURBE D'AVANCE



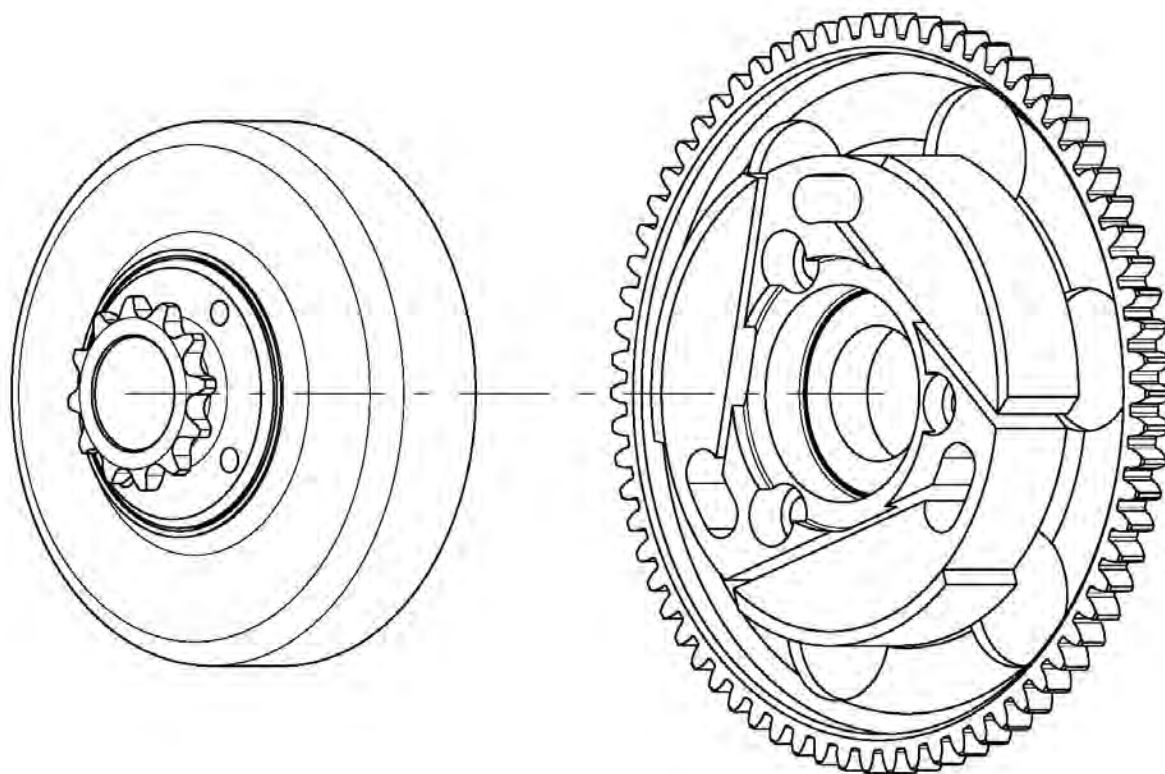
ELECTRONIC BOX MARKING MARQUAGE DU BOITIER ELECTRONIQUE



GEAR ALTERNATIVE FIXING FIXATION ALTERNATIVE DE L'ENGRENAGE



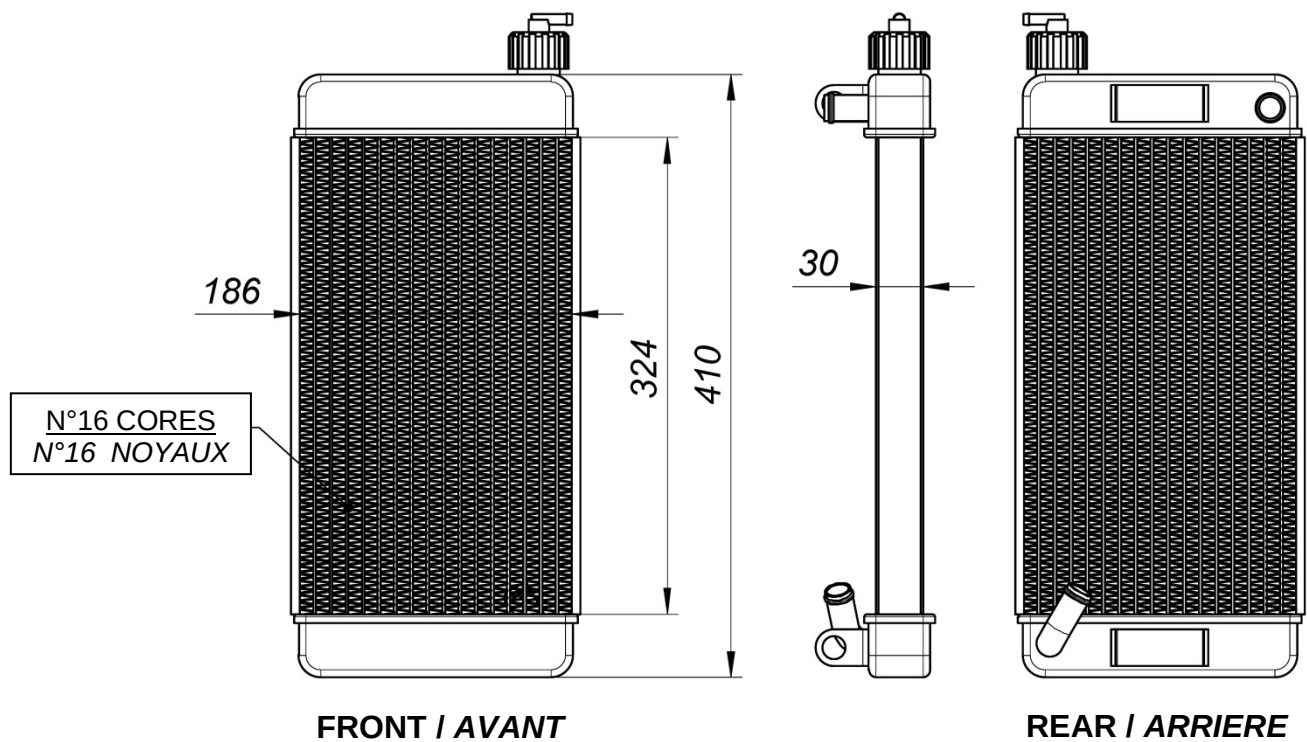
DESCRIPTION OF THE CLUTCH - DESCRIPTION DE L' EMBRAYAGE



Min. weight 300 g
Poids min. 300 g

Min. weight 680 g
Poids min. 680 g

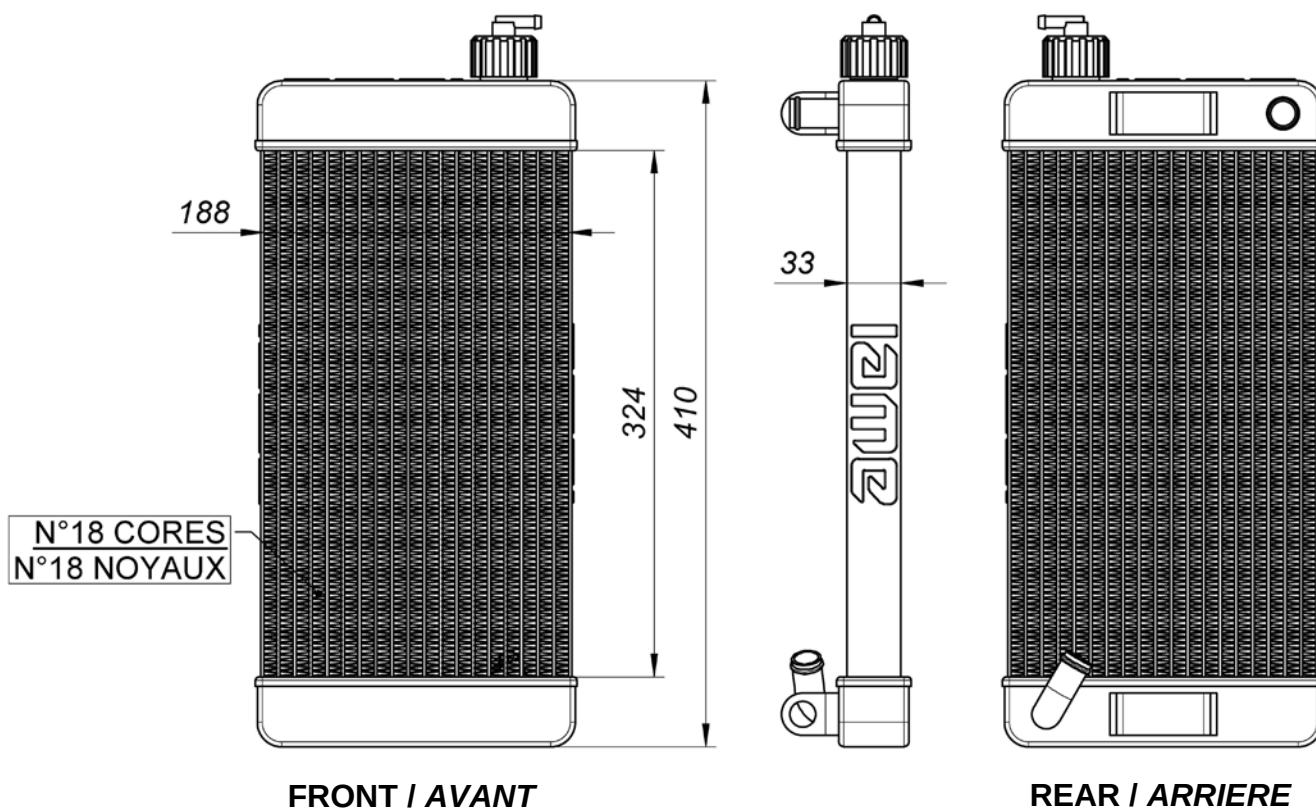
RADIATOR DESCRIPTION AND SKETCH OF PARTS
DESCRIPTION DU RADIATEUR ET SCHEMA ILLUSTRANT LES ELEMENTS



PAINTED AND NOT PAINTED
 PEINT ET PAS PEINT



RADIATOR ALTERNATIVE DESCRIPTION AND SKETCH DESCRIPTION DU RADIATEUR ALTERNATIF

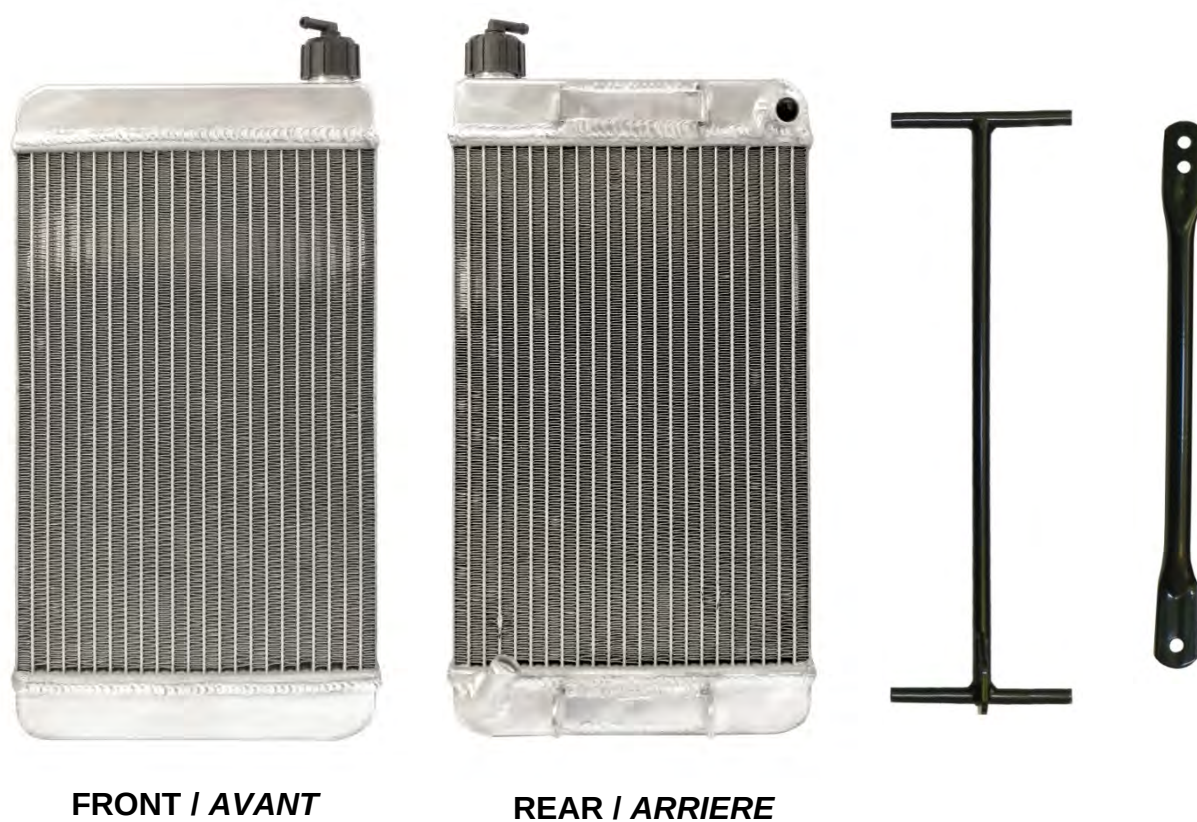
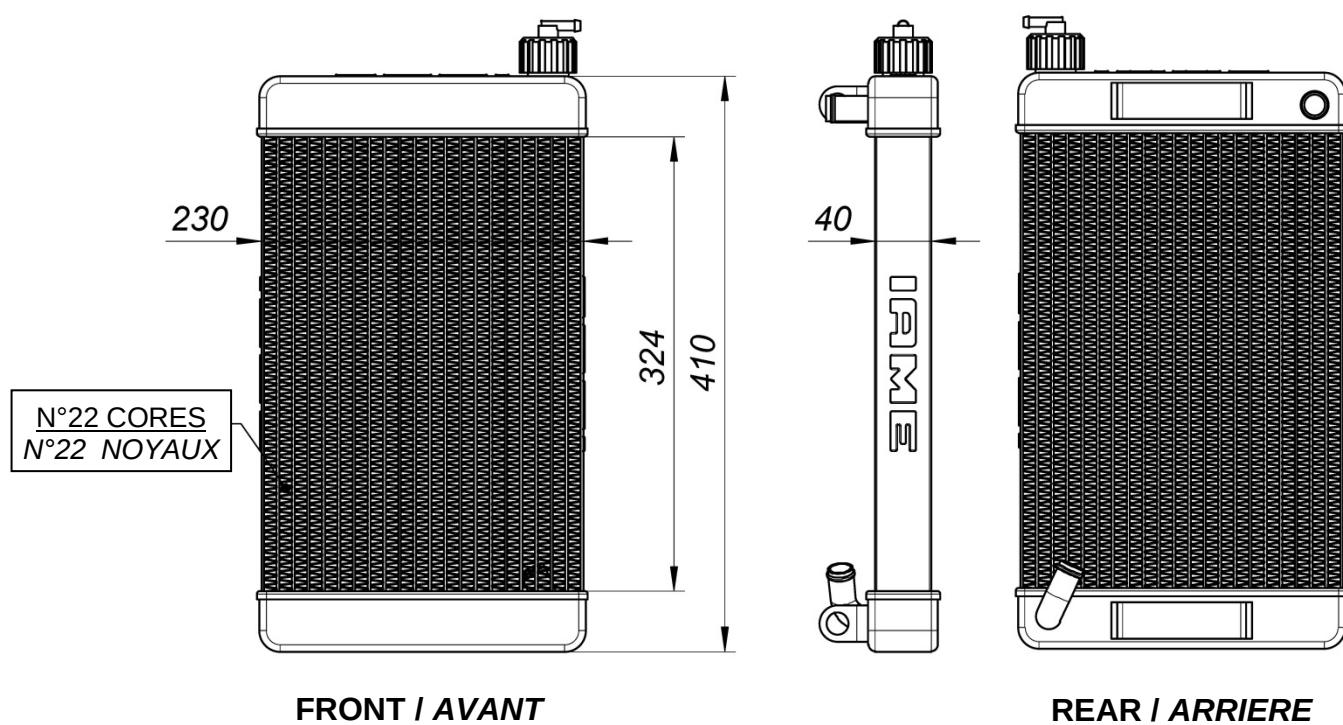


FRONT / AVANT

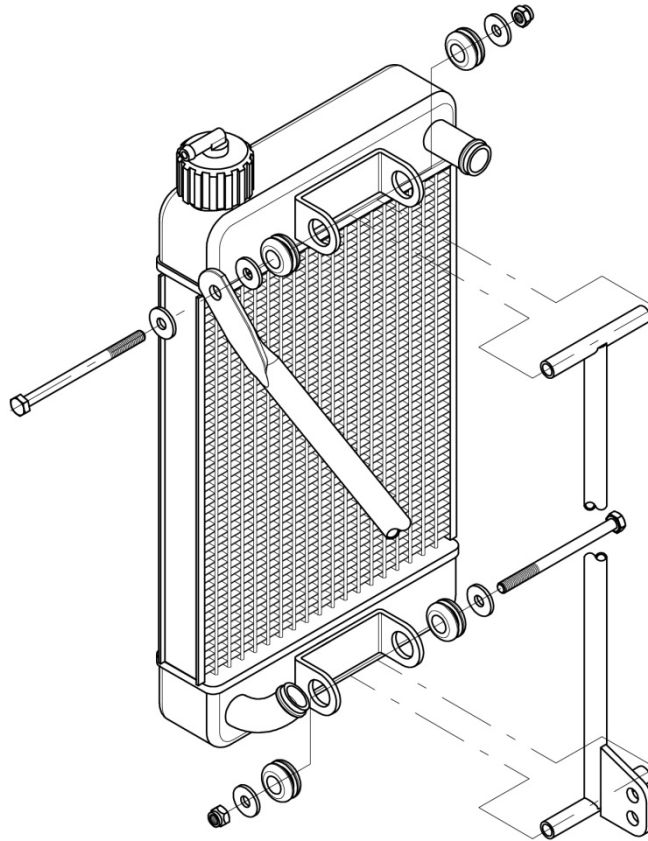
REAR / ARRIERE



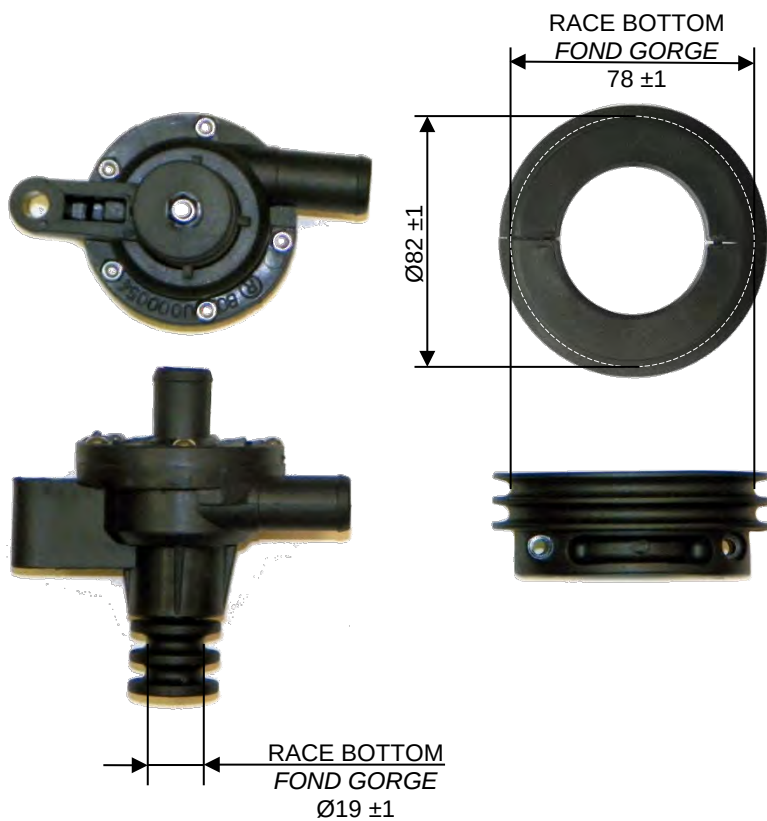
RADIATOR ALTERNATIVE DESCRIPTION AND SKETCH
DESCRIPTION DU RADIATEUR ALTERNATIF



RADIATOR AND ITS SUPPORTS RADIATEUR ET SES SUPPORTS



WATER PUMP GROUP GROUPE POMPE A' EAU



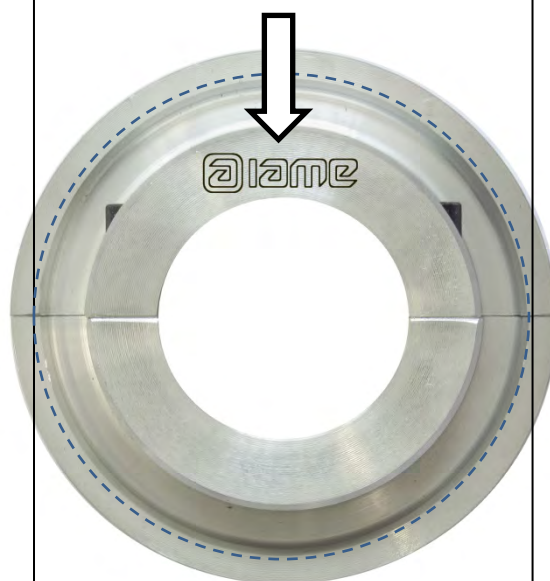
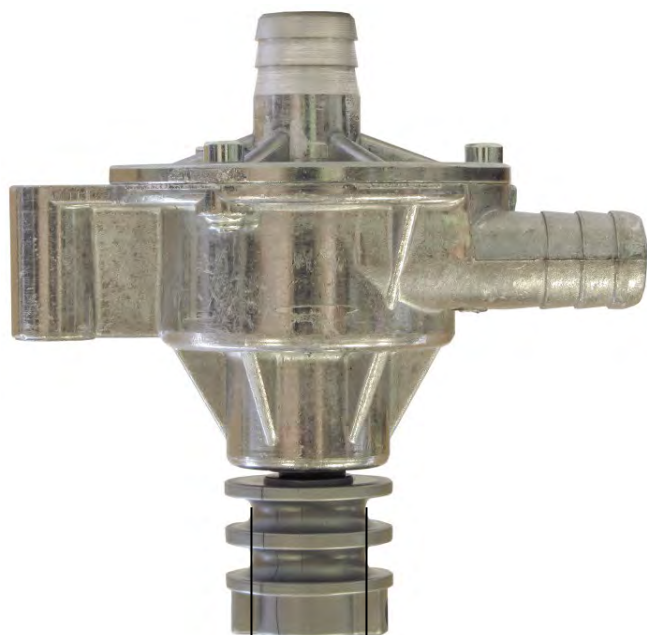
THERMOSTAT



ALTERNATIVE ALTERNATIF

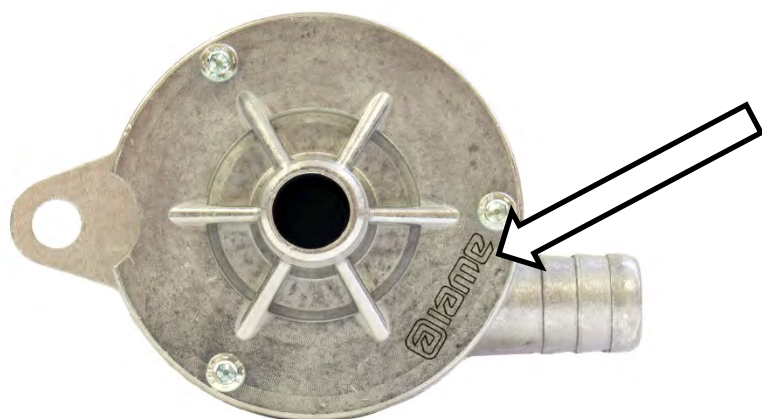


ALTERNATIVE WATER PUMP & PULLEY
GROUPE POMPE A EAU ET POULIE ALTERNATIVES



RACE BOTTOM - FOND GORGE $\varnothing 82.5 \pm 1$

RACE BOTTOM - FOND GORGE
 $\varnothing 20 \pm 1$



ALTERNATIVE RADIATOR SUPPORT
SUPPORT ALTERNATIF DU RADIATEUR



PISTON IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION PISTON

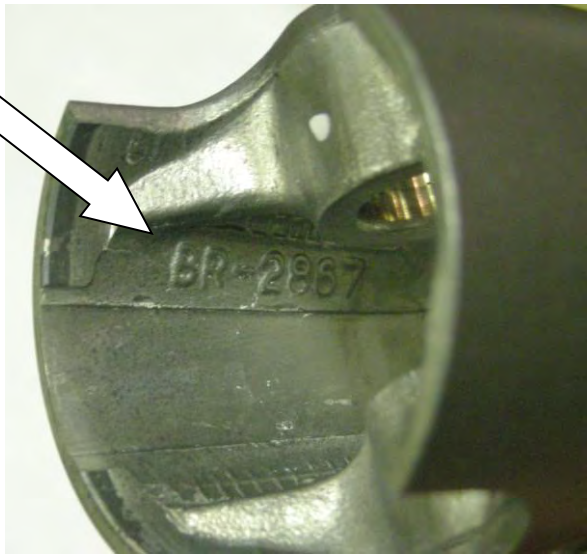
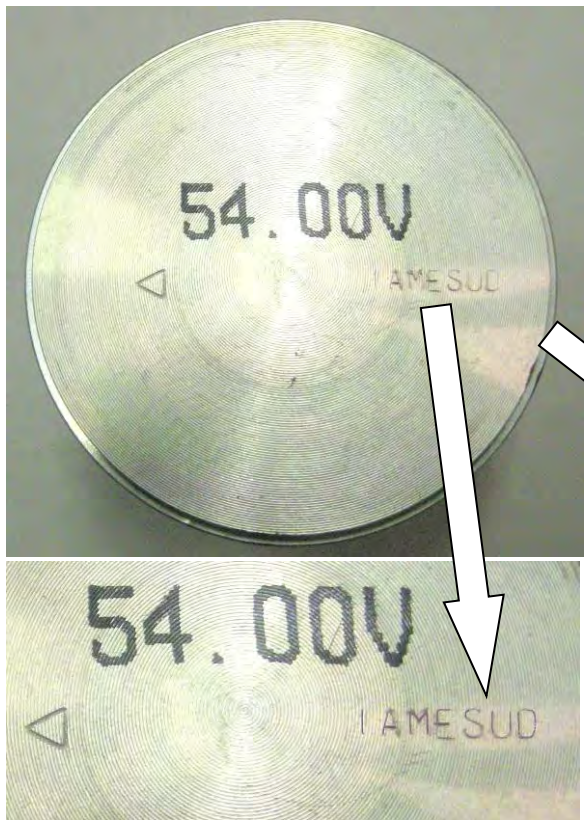
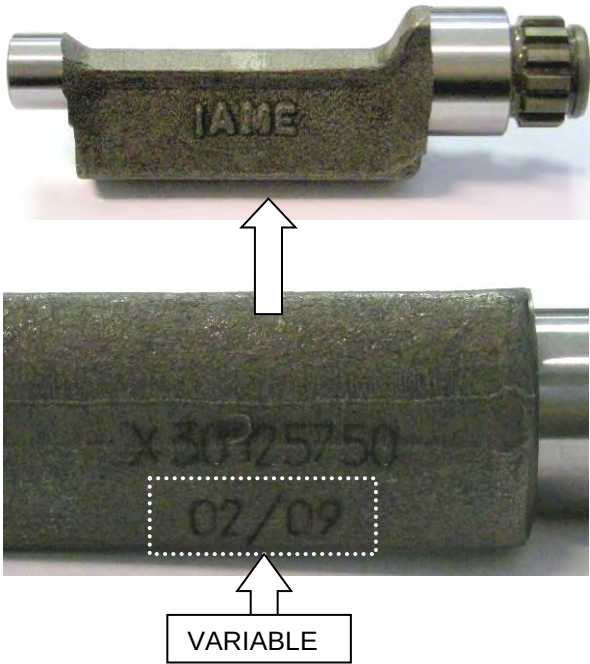
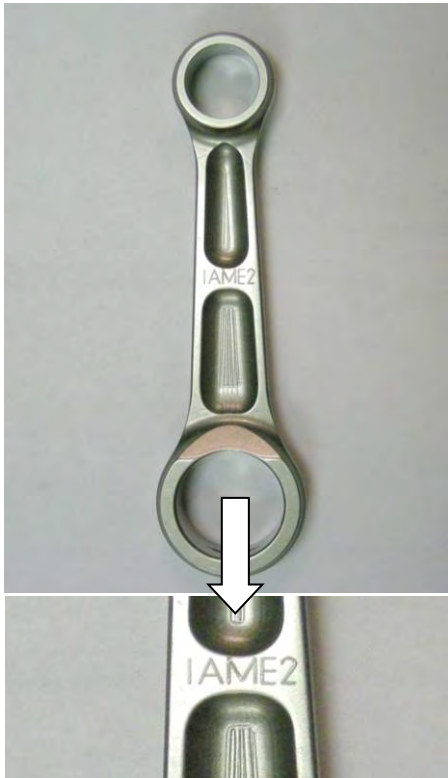
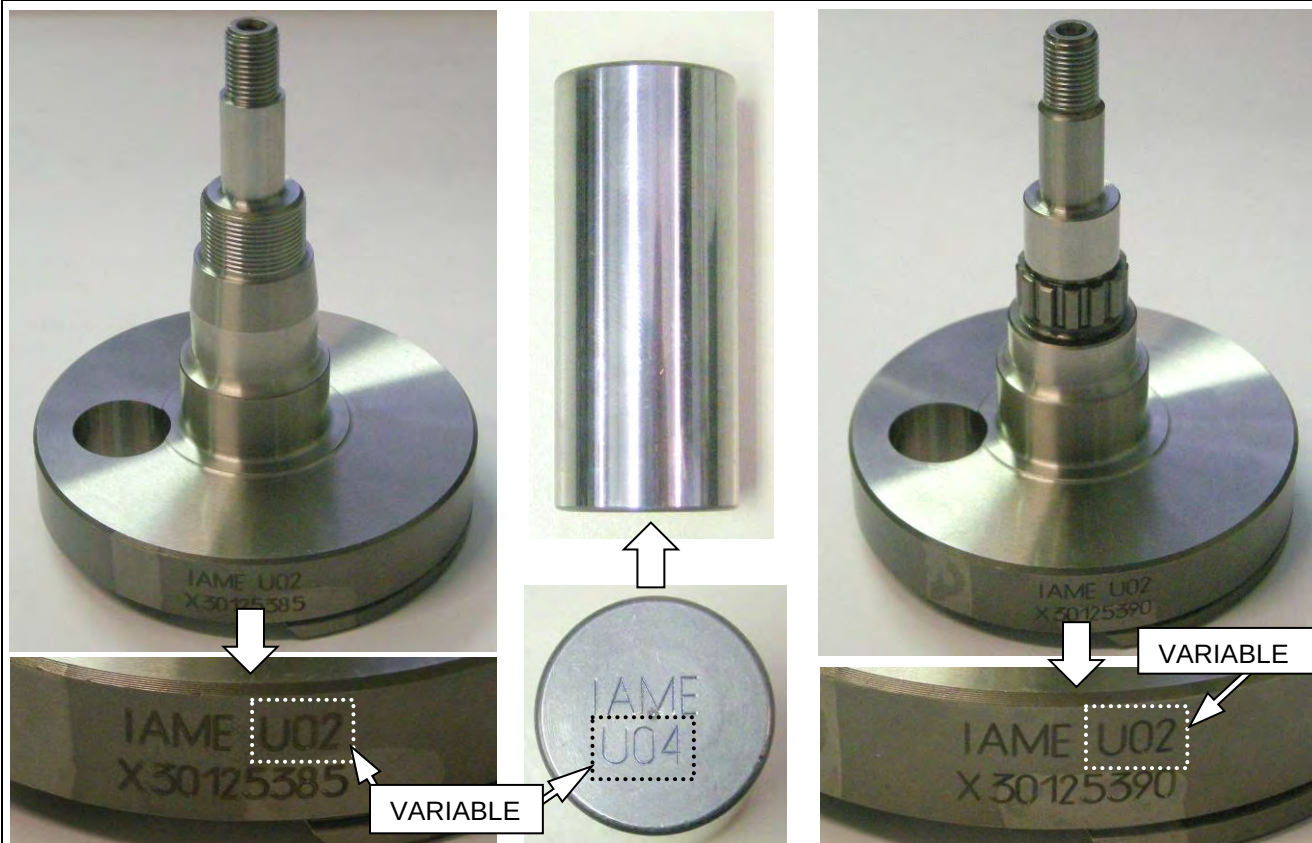


PHOTO IDENTIFICATION CONROD
PHOTO D'IDENTIFICATION BIELLE

IDENTIFICATION BALANCING SHAFT
MARKING
MARQUAGE D'IDENTIFICATION ARBRE
D'EQUILIBRAGE

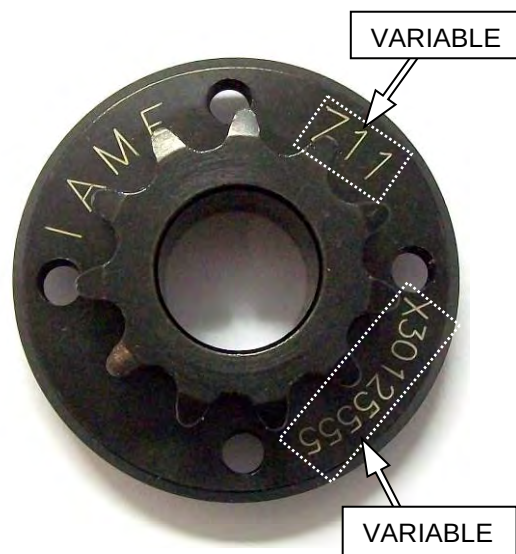
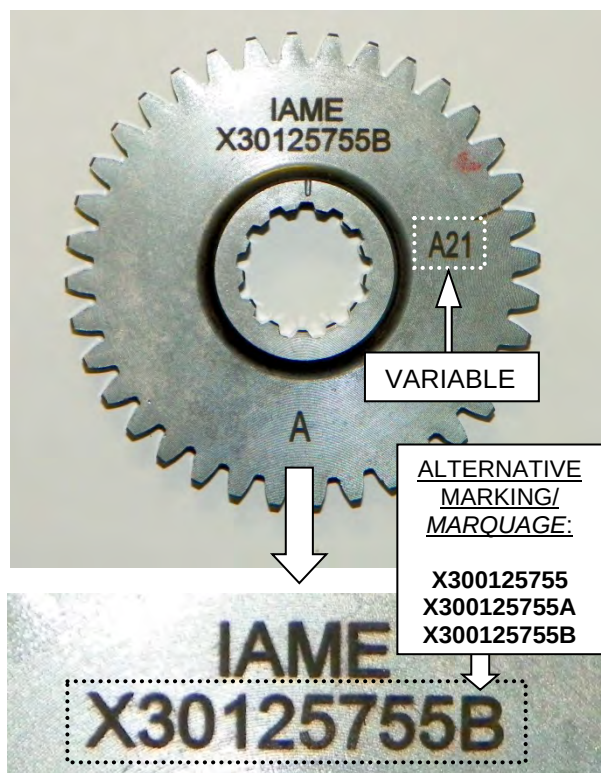


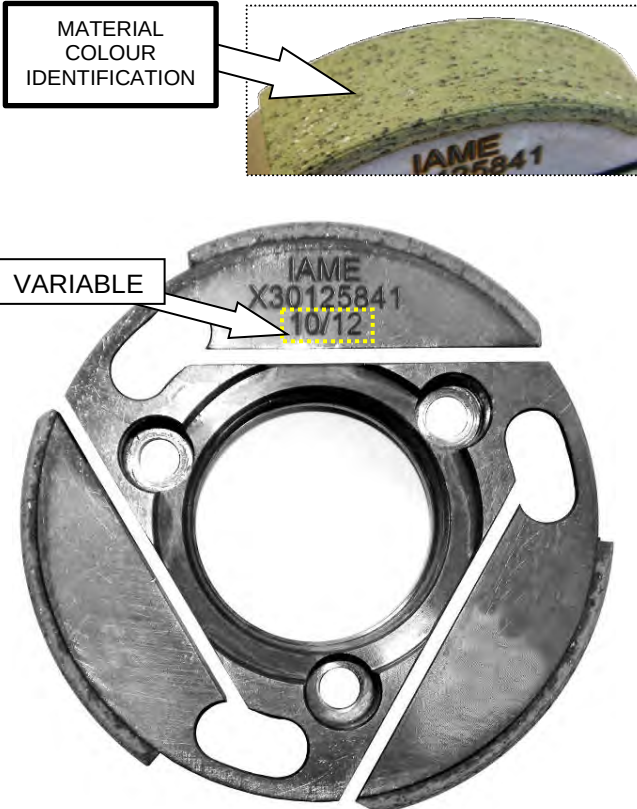
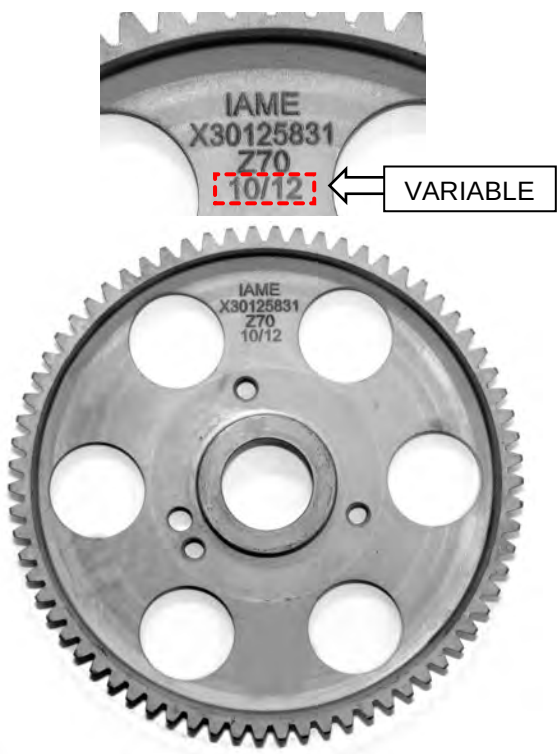
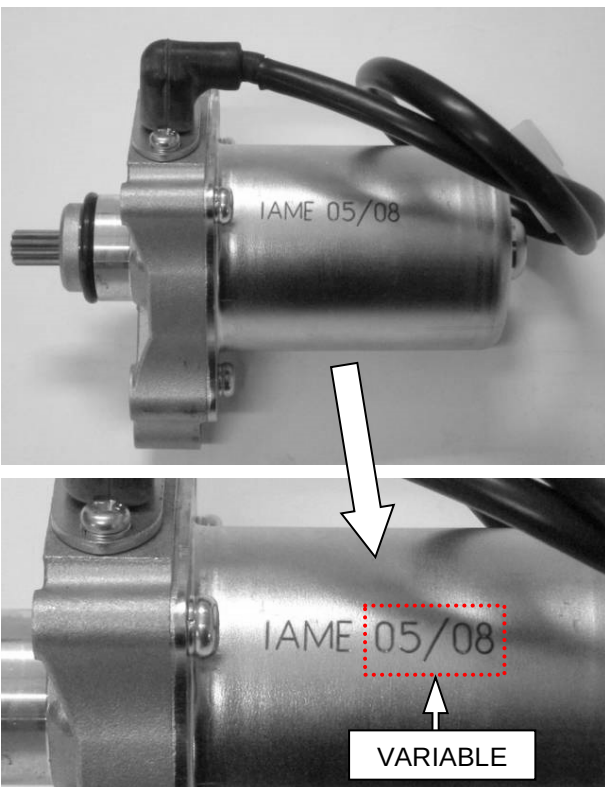
CRANKSHAFT IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DU VILEBREQUIN



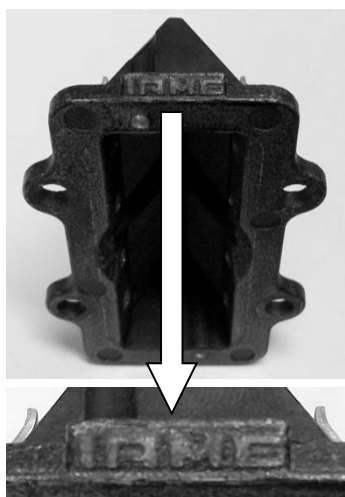
GEAR COMMAND BALANCING SHAFT
IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION
ENGRENAGE ARBRE D'EQUILIBRAGE

SPROCKET IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DU PIGNON

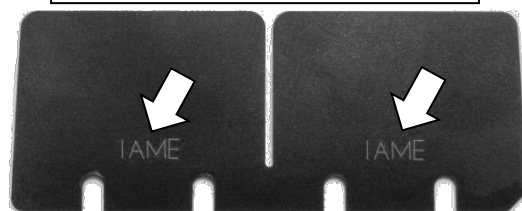


CLUTCH BODY IDENTIFICATION MARKING MARQUAGE D'IDENTIFICATION DU CORPS DE L'EMBRAYAGE  MATERIAL COLOUR IDENTIFICATION VARIABLE IAME X30125841 10/12	CLUTCH DRUM IDENTIFICATION MARKING MARQUAGE D'IDENTIFICATION DE LA CALOTTE  IAME X30125550A
STARTER RING IDENTIFICATION MARKING MARQUAGE D'IDENTIFICATION DE LA COURONNE DE DEMARRAGE  VARIABLE IAME X30125831 Z70 10/12	STARTER IDENTIFICATION MARKING MARQUAGE D'IDENTIFICATION DU DEMARREUR  VARIABLE IAME 05/08

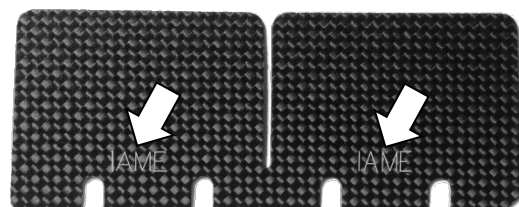
REED GROUP & PETALS IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DE LA BOÎTE À CLAPETS ET CLAPETS



VETRONITE – FIBRE DE VERRE

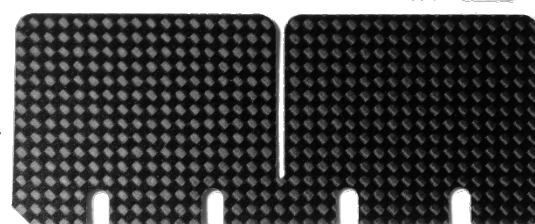


CARBON FIBER / FIBRE CARBONE



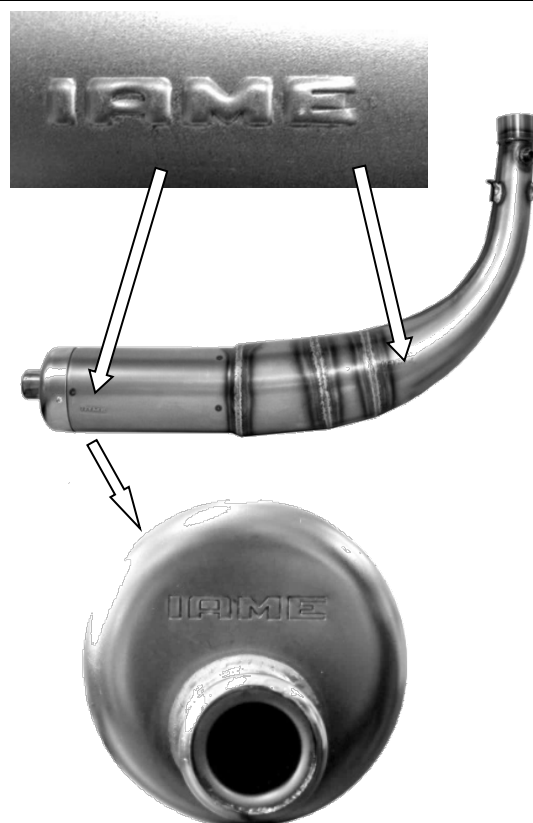
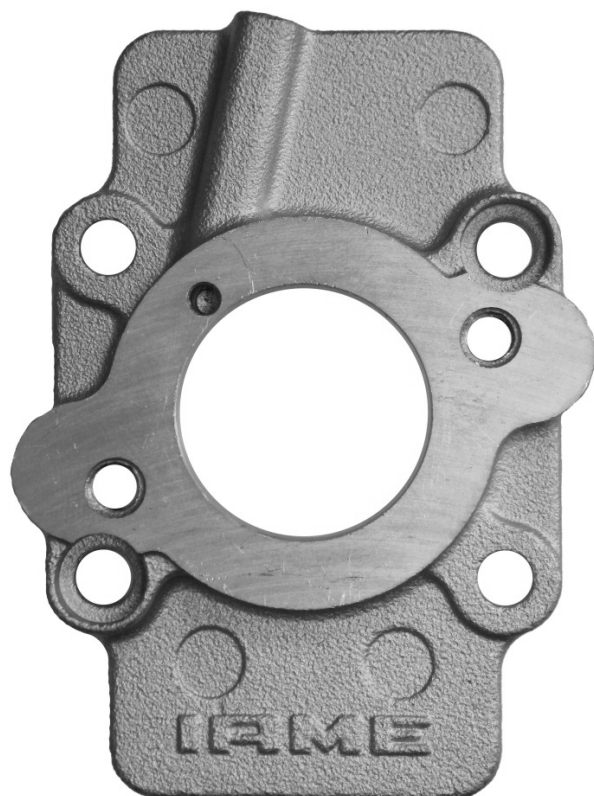
FRONT SIDE
CÔTÉ AVANT

REAR SIDE
CÔTÉ ARRIÈRE

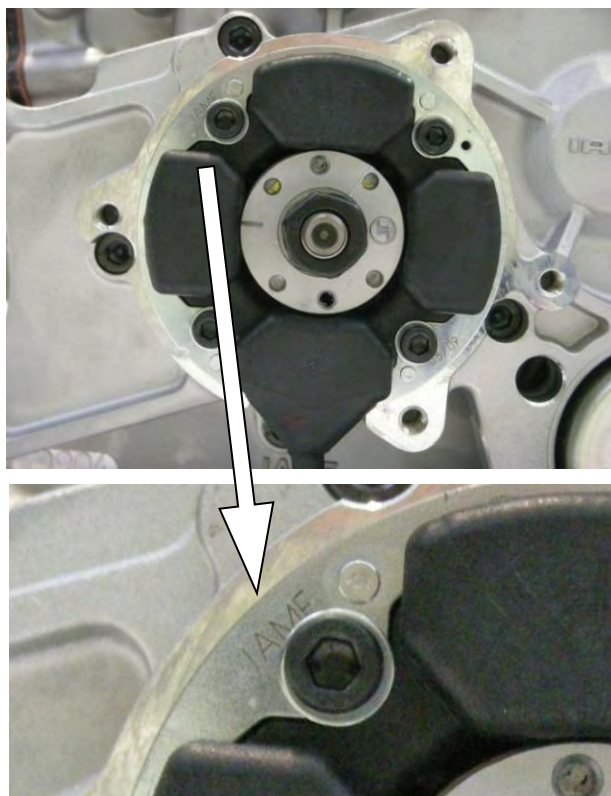


**PHOTO IDENTIFICATION CARBURETOR
INLET CONVEYOR**
**MARQUAGE D'IDENTIFICATION DU
COLLECTEUR D'ASPIRATION**

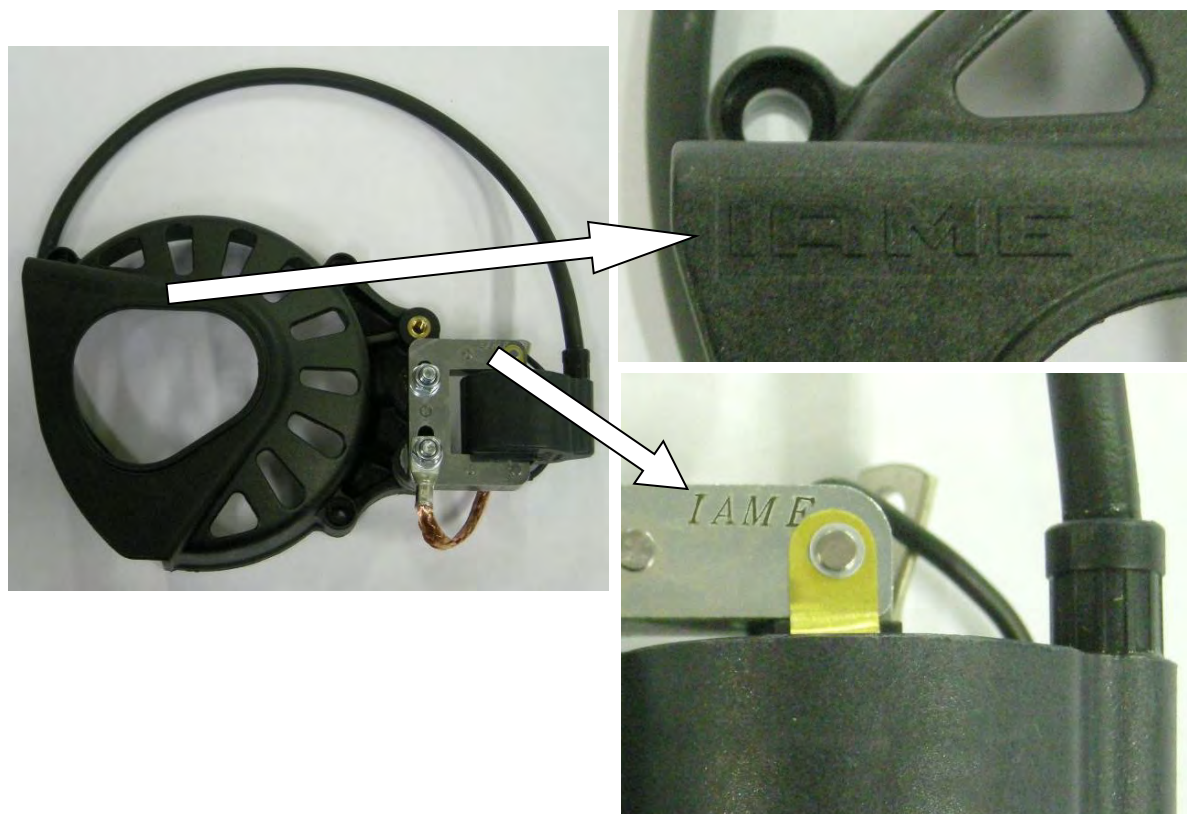
**EXHAUST SILENCER IDENTIFICATION
MARKING**
**MARQUAGE D'IDENTIFICATION
ECHAPPEMENT**



STATOR IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DU STATOR



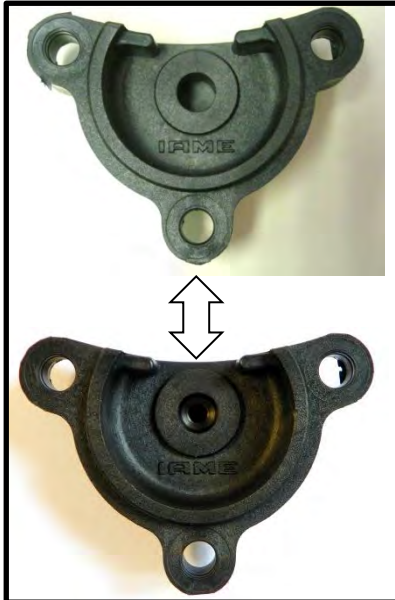
CLUTCH COVER AND H.T. COIL IDENTIFICATION MARKING
MARQUAGE DU COUVERCLE D'EMBRAYAGE ET DE LA BOBINE



BENDIX COVER IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DU COUVERCLE
DU CONTRE-ARBRE DE DEMARRAGE



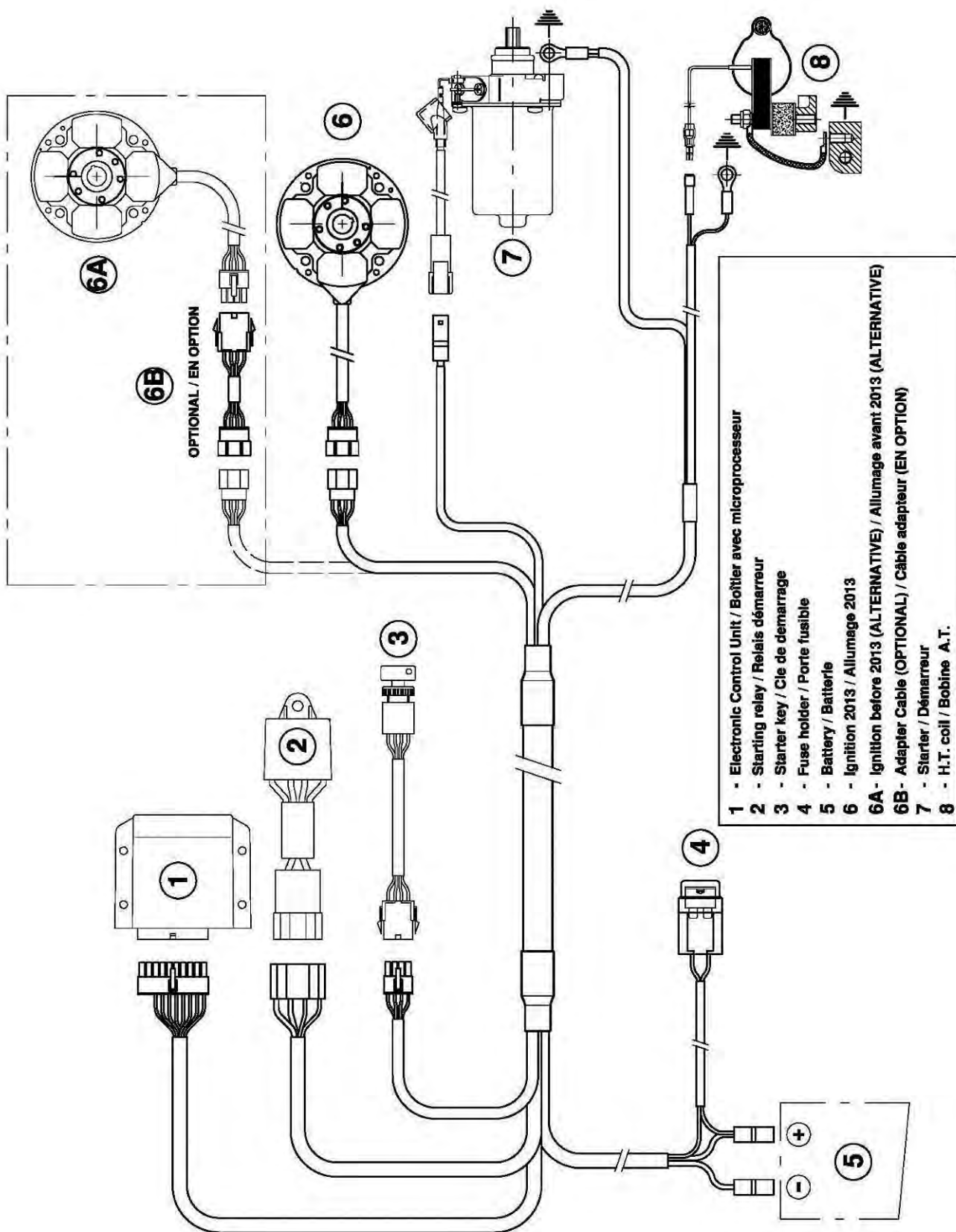
ALTERNATIVE



ALTERNATIVE RADIATOR IDENTIFICATION MARKING
MARQUAGE ALTERNATIF D'IDENTIFICATION DU RADIATEUR



WIRING DIAGRAM (SELETTA DIGITAL "K" IGNITION 2013)
SCHÉMA CIRCUIT ELECTRIQUE (ALLUMAGE SELETTA DIGITAL "K" 2013)



FROM 2014 ON - A PARTIR DE 2014

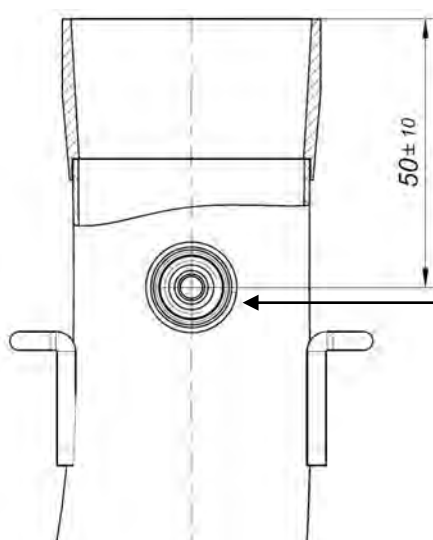
STICKER APPLICATION AREA - ESPACE POUR L'APPLICATION DES ADHÉSIFS



ALTERNATIVE AREA / ZONE ALTERNATIVE



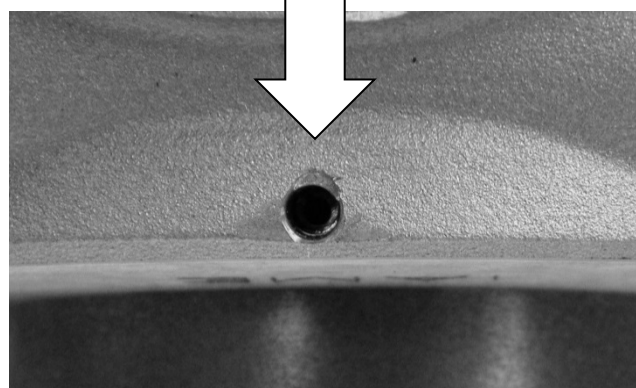
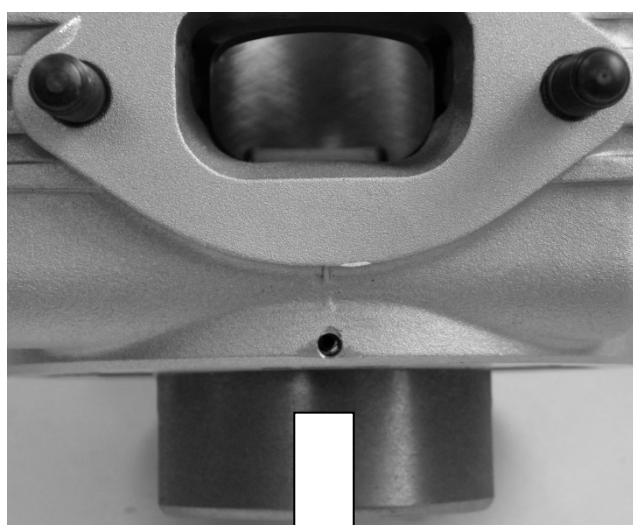
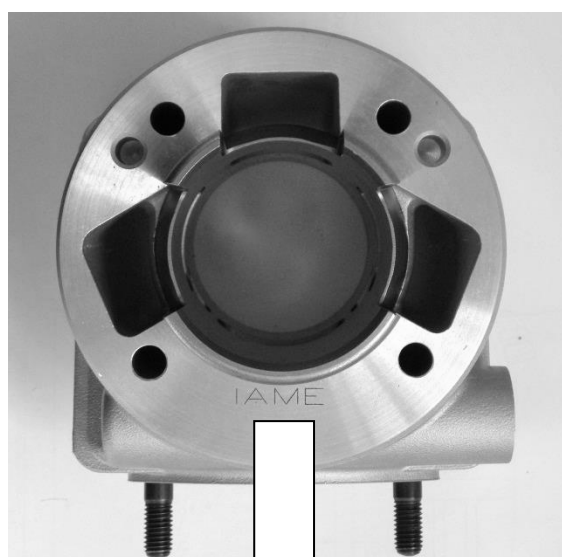
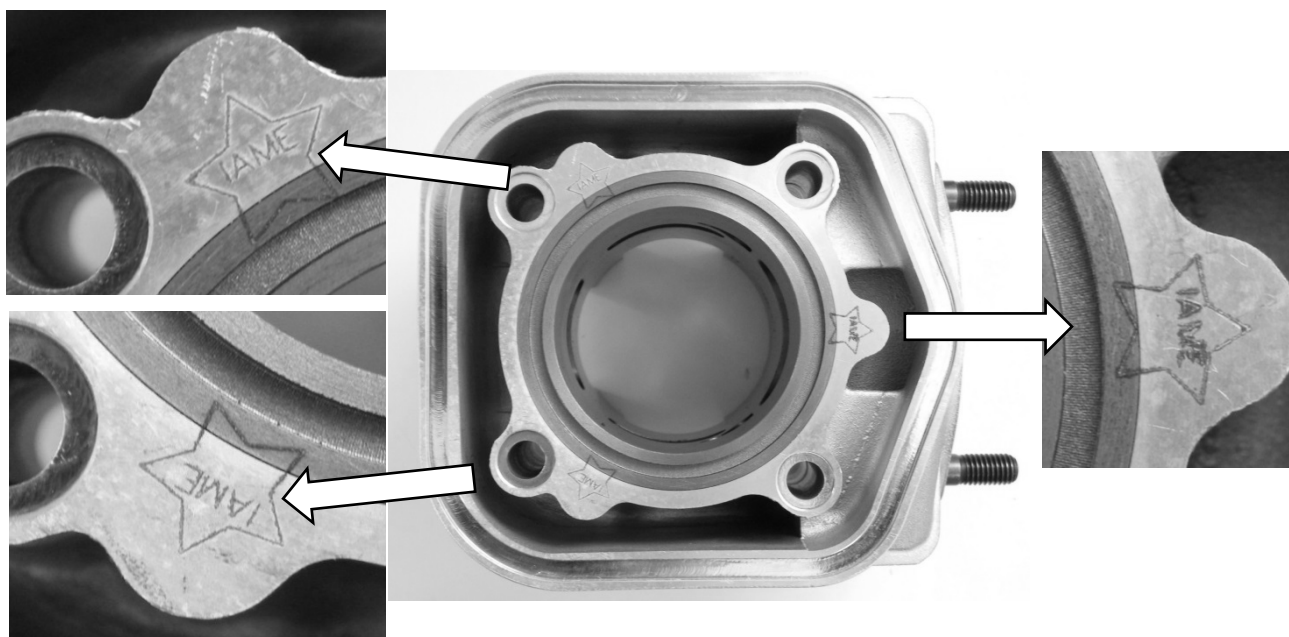
EXHAUST TEMPERATURE SENSOR CAPTEUR DE TEMPERATURE D'ÉCHAPPEMENT



EXHAUST
TEMPERATURE
SENSOR POSITION
(OPTIONAL)

POSITION DU
CAPTEUR
DE TEMPERATURE
D'ÉCHAPPEMENT
(EN OPTION)

CYLINDER IDENTIFICATION MARKING
MARQUAGE D'IDENTIFICATION DU CYLINDRE



ALTERNATIVE PUSH BUTTONS – START & STOP
BOUTONS ALTERNATIF “START & STOP” DU DEMARREUR

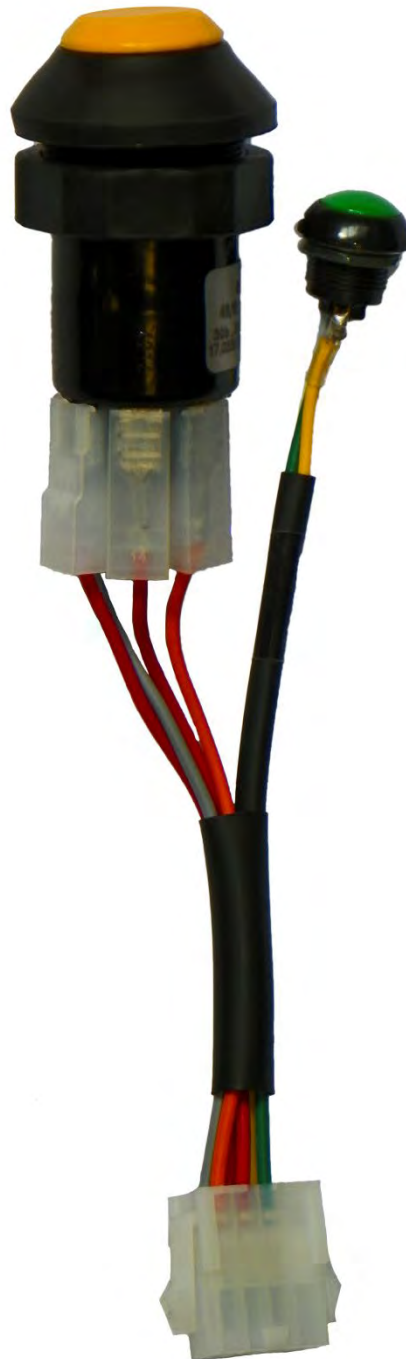
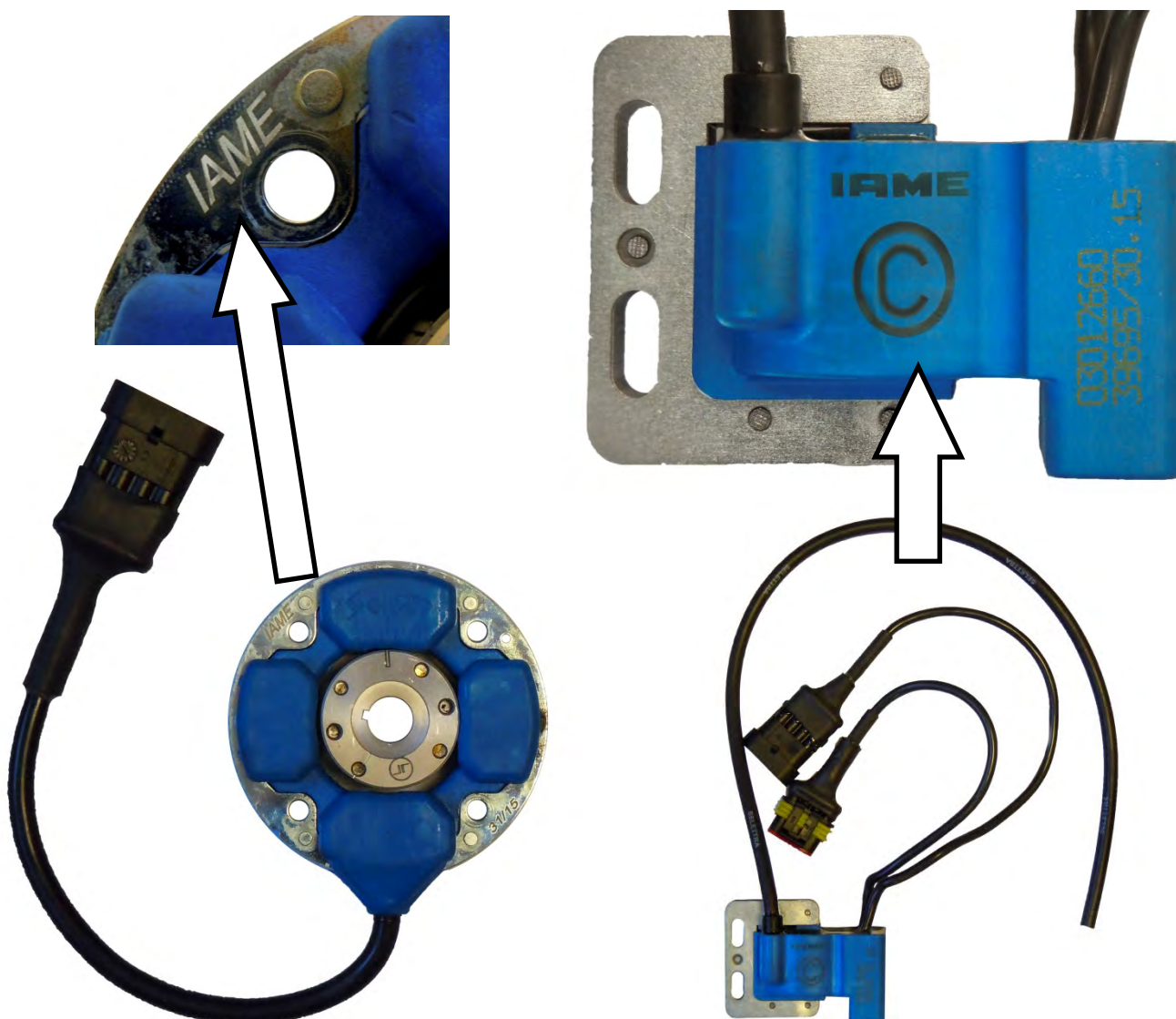


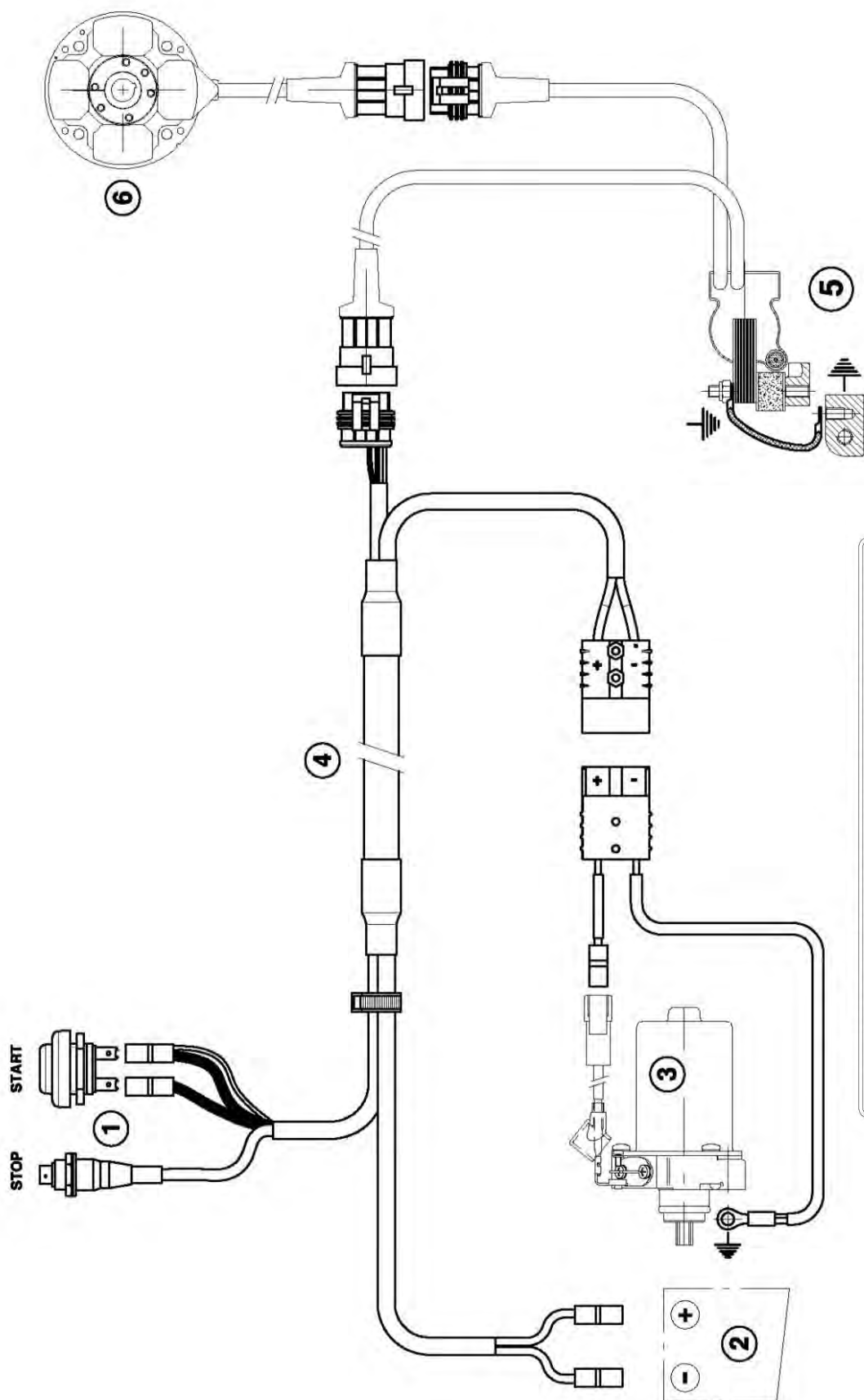
PHOTO COMPLETE ALTERNATIVE WIRING LOOM
 PHOTO DU CABLAGE ELECTRIQUE COMPLET ALTERNATIF



PHOTO OF SELETTRA ALTERNATIVE DIGITAL "S" IGNITION, WITH IAME MARKING
 PHOTO DE L'ALLUMAGE SELETTRA DIGITAL "S", AVEC MARQUAGE IAME



WIRING DIAGRAM (SELETTRA DIGITAL "S" IGNITION)
 SCHÉMA CIRCUIT ELECTRIQUE (ALLUMAGE SELETTRA DIGITAL "S")



1 - Push buttons Start & Stop / Bouton poussoir du démarreur

2 - Battery / Batterie

3 - Starter / Démarreur

4 - Wiring cable / Cablage électrique

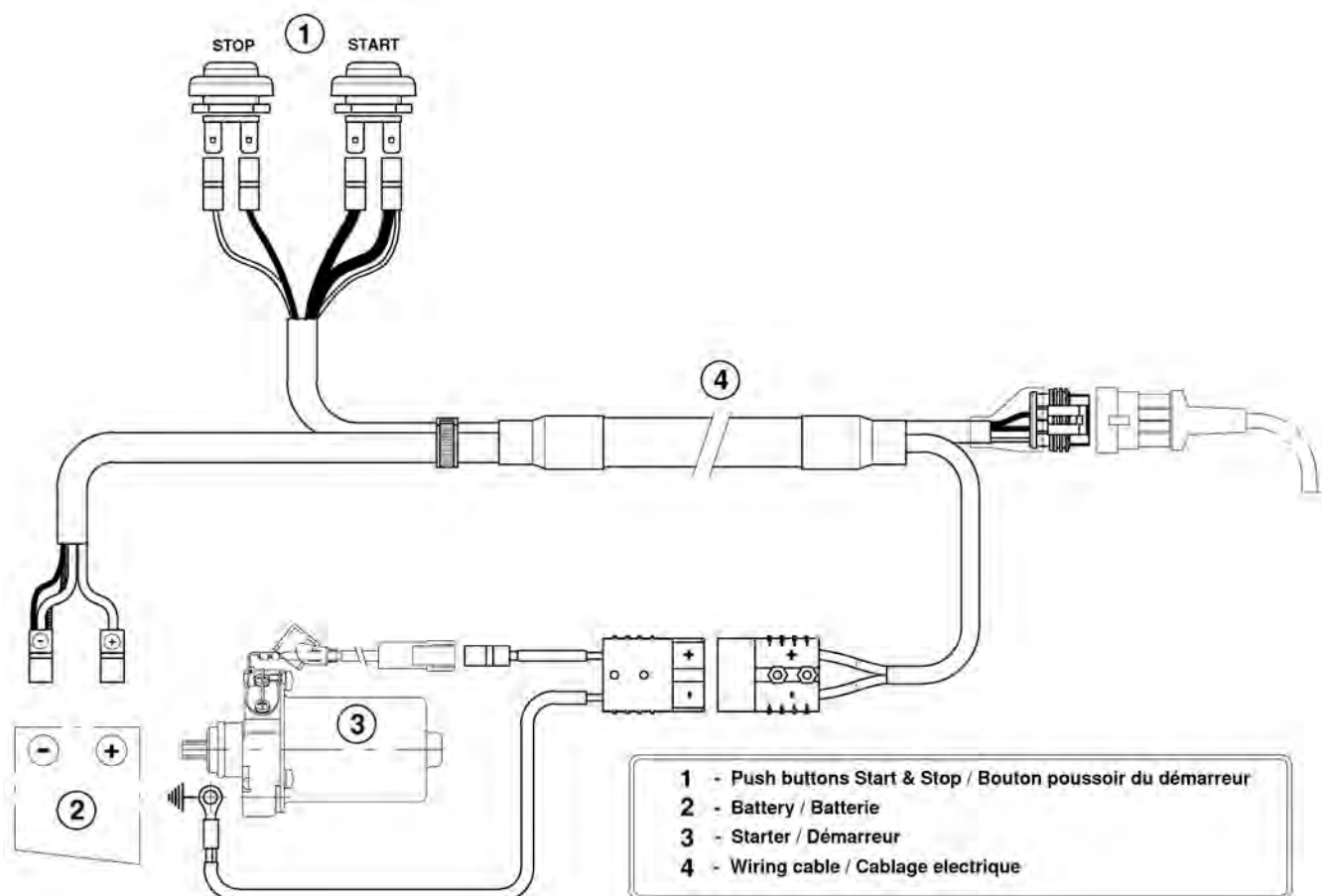
5 - H.T. coil and Electronic Control Unit
 / Bobine A.T. et boîtier avec microprocesseur

6 - Ignition / Allumage

ALTERNATIVE WIRING LOOM
CABLAGE ELECTRIQUE COMPLET ALTERNATIF



ALTERNATIVE WIRING LOOM DIAGRAM
SCHÉMA CIRCUIT ELECTRIQUE ALTERNATIF



ALTERNATIVE WIRING LOOM
CABLAGE ELECTRIQUE COMPLET ALTERNATIF



ALTERNATIVE WIRING LOOM DIAGRAM
SCHÉMA CIRCUIT ELECTRIQUE ALTERNATIF

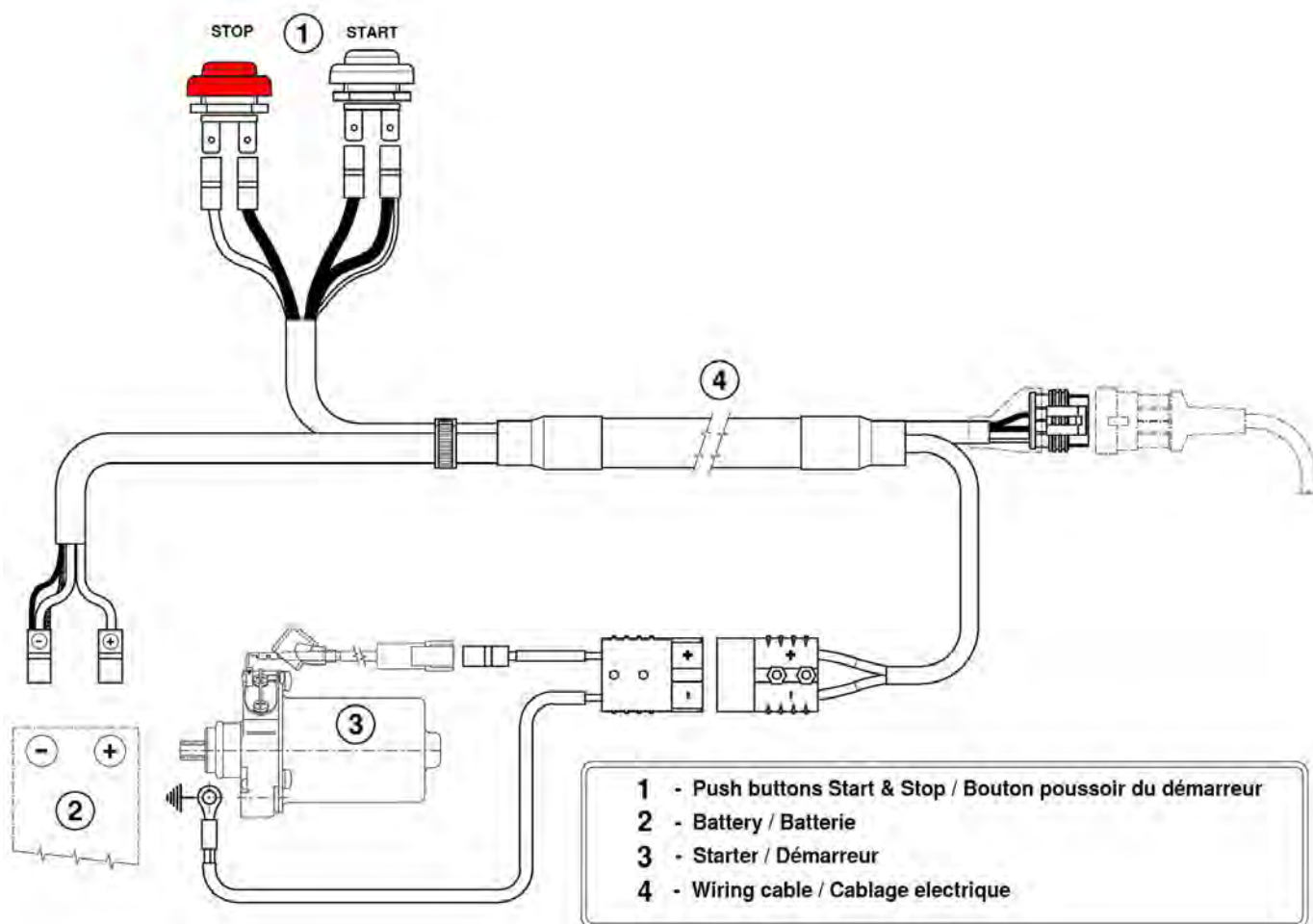
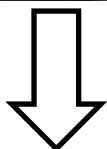
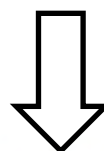


PHOTO IDENTIFICATION REED GROUP
 PHOTO IDENTIFICATION BOÎTE À CLAPETS

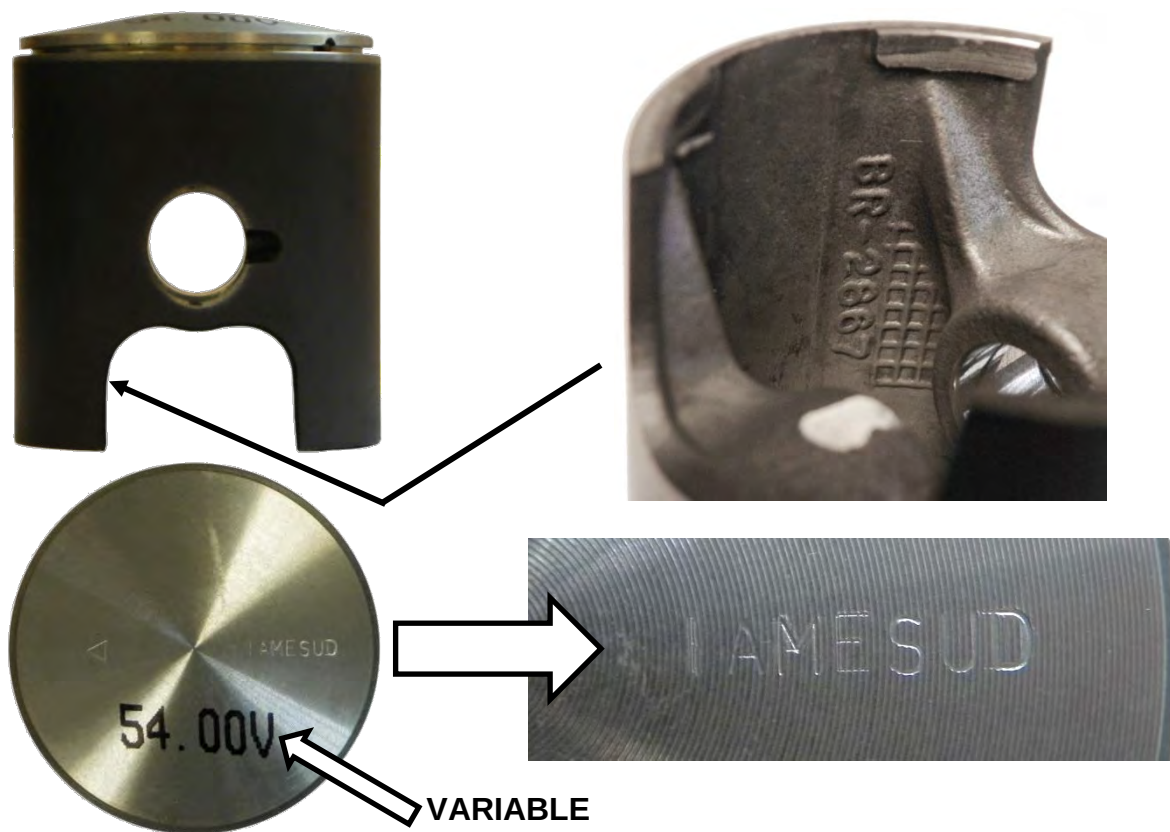
ACTUAL VERSION
 VERSION COURANTE



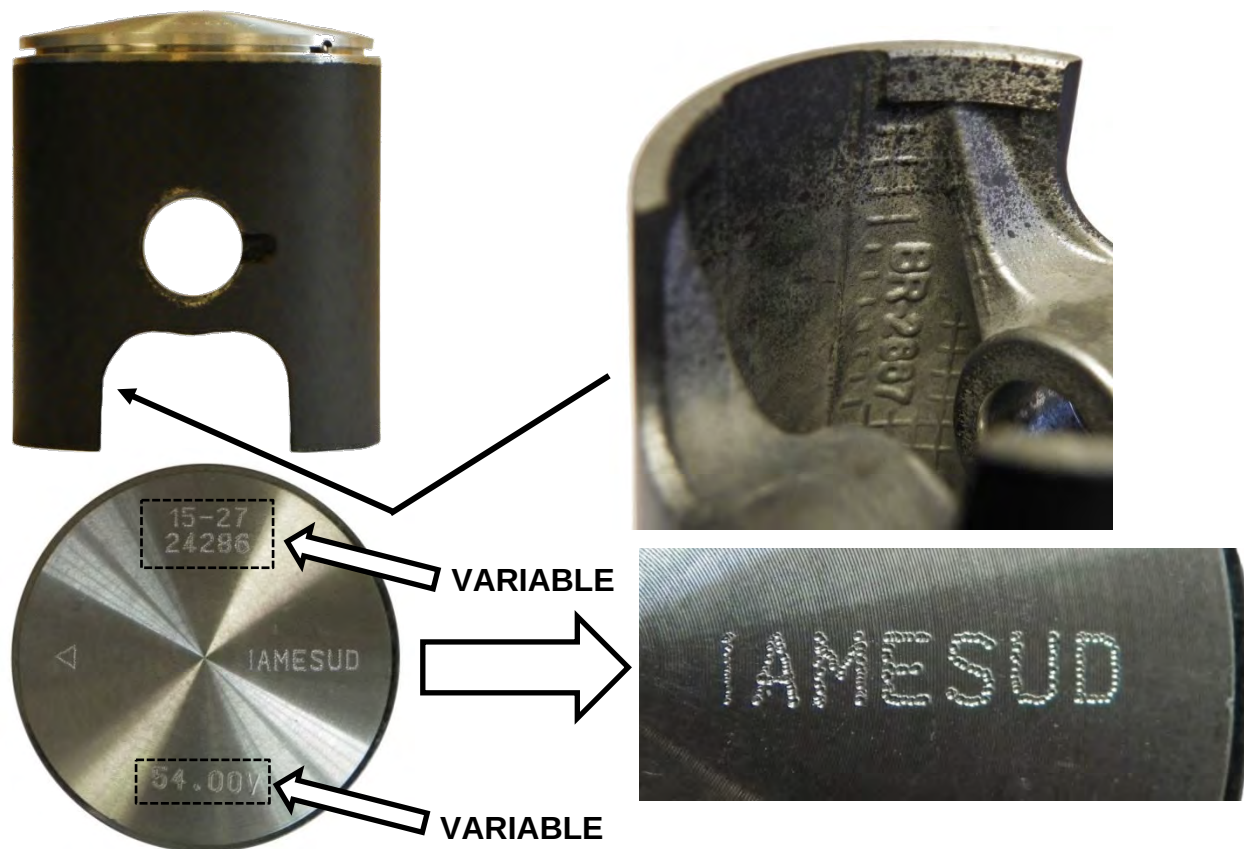
ALTERNATIVE VERSION
 VERSION ALTERNATIVE



ACTUAL PISTON
PISTON COURANT



ALTERNATIVE PISTON
PISTON ALTERNATIF



ALTERNATIVE CONROD
 BIELLE ALTERNATIVE

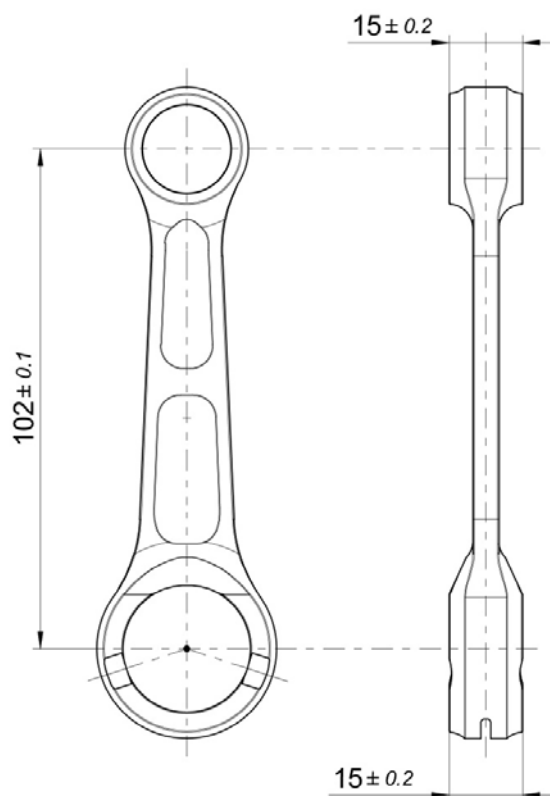
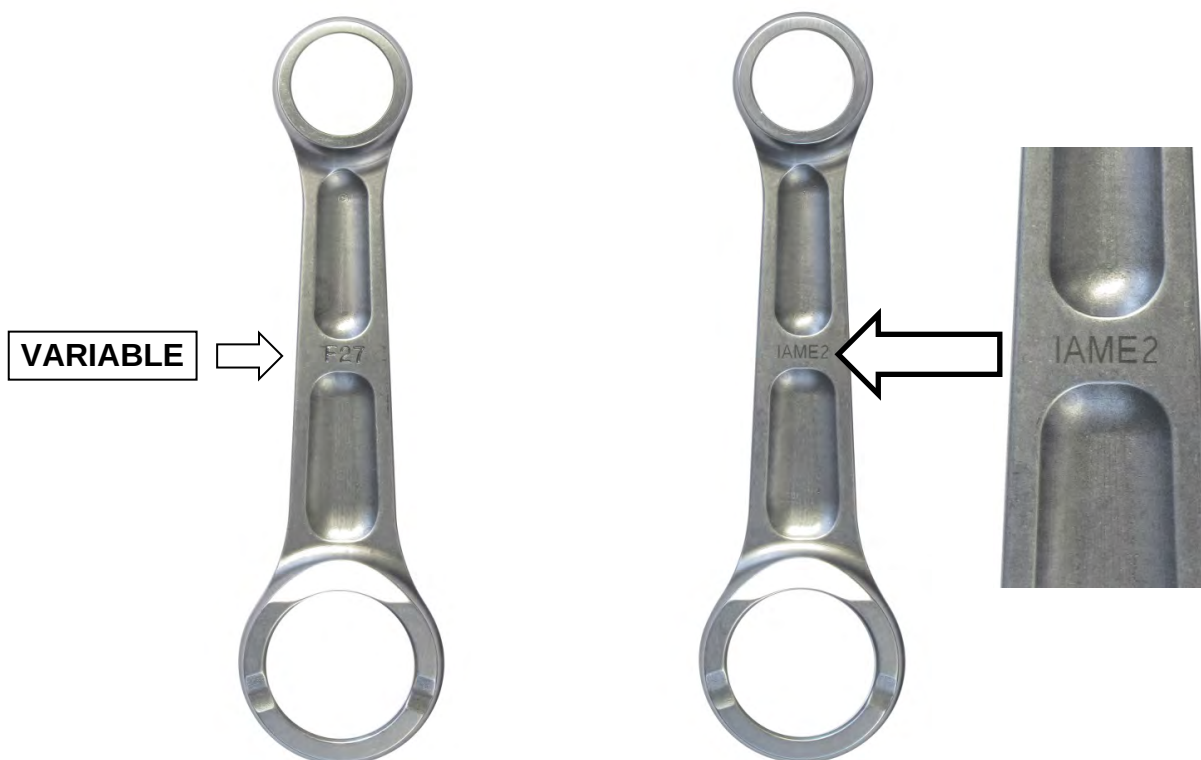


PHOTO OF THE CONROD BOTH SIDE – ALTERNATIVE
 PHOTO DES DEUX COTES DE LA BIELLE - ALTERNATIVE



BOTH TYPES OF CONROD CAN BE USED WITH BOTH TYPES OF WASHERS (IN COUPLE)
LES DEUX TYPES DE BIELLE PEUVENT ÊTRE UTILISÉS AVEC LES DEUX TYPES DE
RONDELLES (EN COUPLE)

PHOTO IDENTIFICATION OF SMALL END CONROD BEARING – TYPES ALTERNATIVE
PHOTO D'IDENTIFICATION DU ROULEMENT PIED DE BIELLE – TYPES ALTERNATIFS

TYPE 1



TYPE 2



PHOTO IDENTIFICATION OF CONROD WASHER – TYPES ALTERNATIVE
PHOTO D'IDENTIFICATION RONDELLE DE BIELLE – TYPES ALTERNATIVES

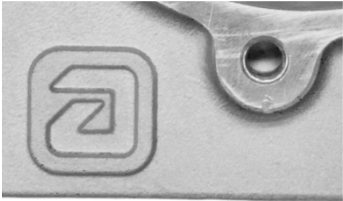
TYPE 1



TYPE 2

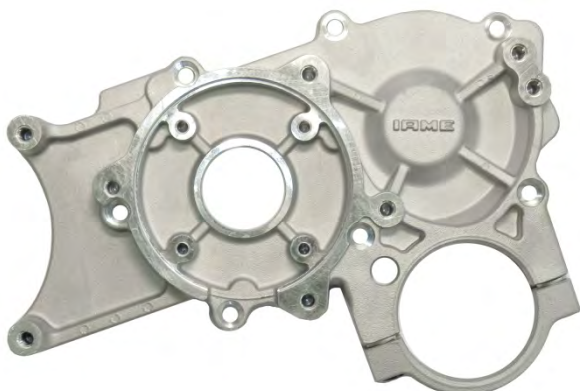


PARTS WITH ALTERNATIVE NEW LOGO "IAME"
COMPOSANTS AVEC UN NOUVEAU LOGO ALTERNATIF «IAME»

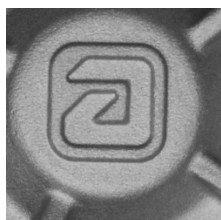
CYLINDER HEAD CULASSE	CYLINDER CYLINDRE
 NEW / NOUVEAU LOGO 	 NEW / NOUVEAU LOGO 
SEMICARTER TRANSMISSION SIDE DEMI-CARTER CÔTÉ PIGNON	SEMICARTER IGNITION SIDE DEMI-CARTER CÔTÉ ALLUMAGE
 NEW / NOUVEAU LOGO 	 NEW / NOUVEAU LOGO 

PARTS WITH ALTERNATIVE NEW LOGO "IAME"
COMPOSANTS AVEC UN NOUVEAU LOGO ALTERNATIF «IAME»

IGNITION COVER
COUVERCLE DE L'ALLUMAGE



NEW / NOUVEAU LOGO



CLUTCH COVER
COUVERCLE D'EMBRAYAGE



NEW / NOUVEAU LOGO



REED GROUP
GROUPE CLAPETS



NEW / NOUVEAU LOGO



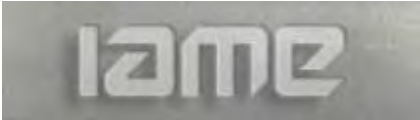
CARBURETTOR INLET CONVEYOR
CONVOYEUR D'ADMISSION



NEW / NOUVEAU LOGO



PARTS WITH ALTERNATIVE NEW LOGO "IAME"
COMPOSANTS AVEC UN NOUVEAU LOGO ALTERNATIF «IAME»

RADIATOR RADIATEUR	EXHAUST SILENCER ECHAPPEMENT
NEW / NOUVEAU LOGO 	 NEW / NOUVEAU LOGO  NEW / NOUVEAU LOGO 
	BALANCING SHAFT
	NEW / NOUVEAU LOGO  

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

LES AUTRES COMPOSANTS DU MOTEUR AVEC COMME MARQUAGE (LASER OU POINÇONNEUSE) L'ANCIEN LOGO OU ÉCRIT «IAME»

IAME

or

IAME

NOW COULD BE MARKED WITH NEW LOGO "IAME"

POURRAIENT MAINTENANT ETRE MARQUES AVEC LE NOUVEAU LOGO "IAME"

iaame

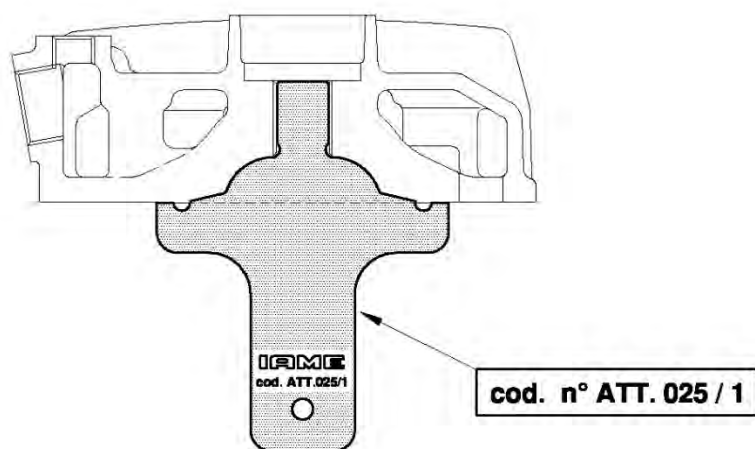
or

iaame

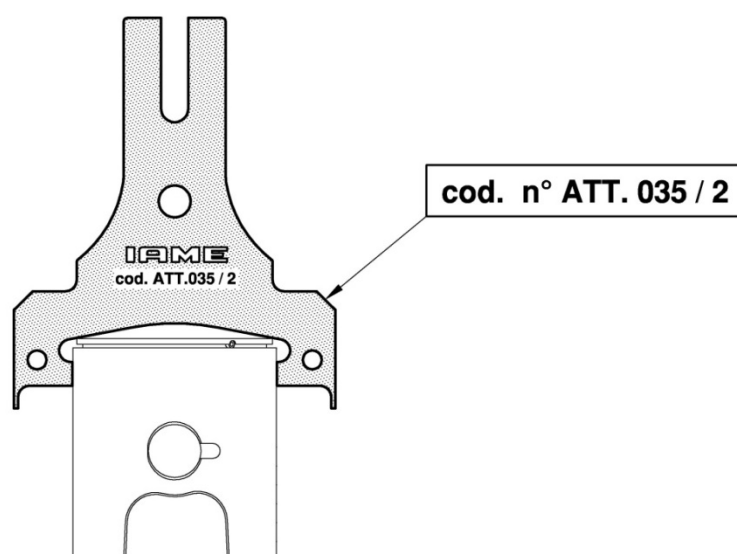
or



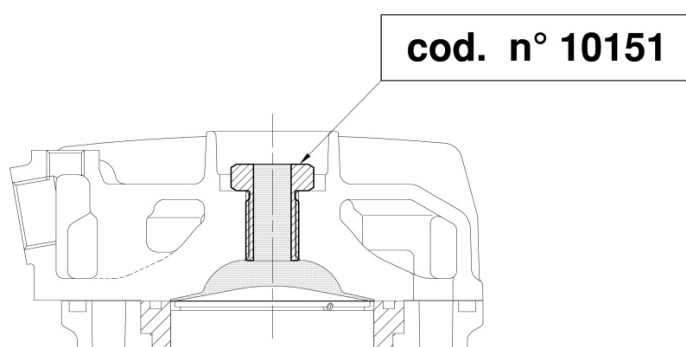
CHECKING THE SHAPE OF THE COMBUSTION CHAMBER
CONTRÔLE DE LA FORME DE LA CHAMBRE DE COMBUSTION



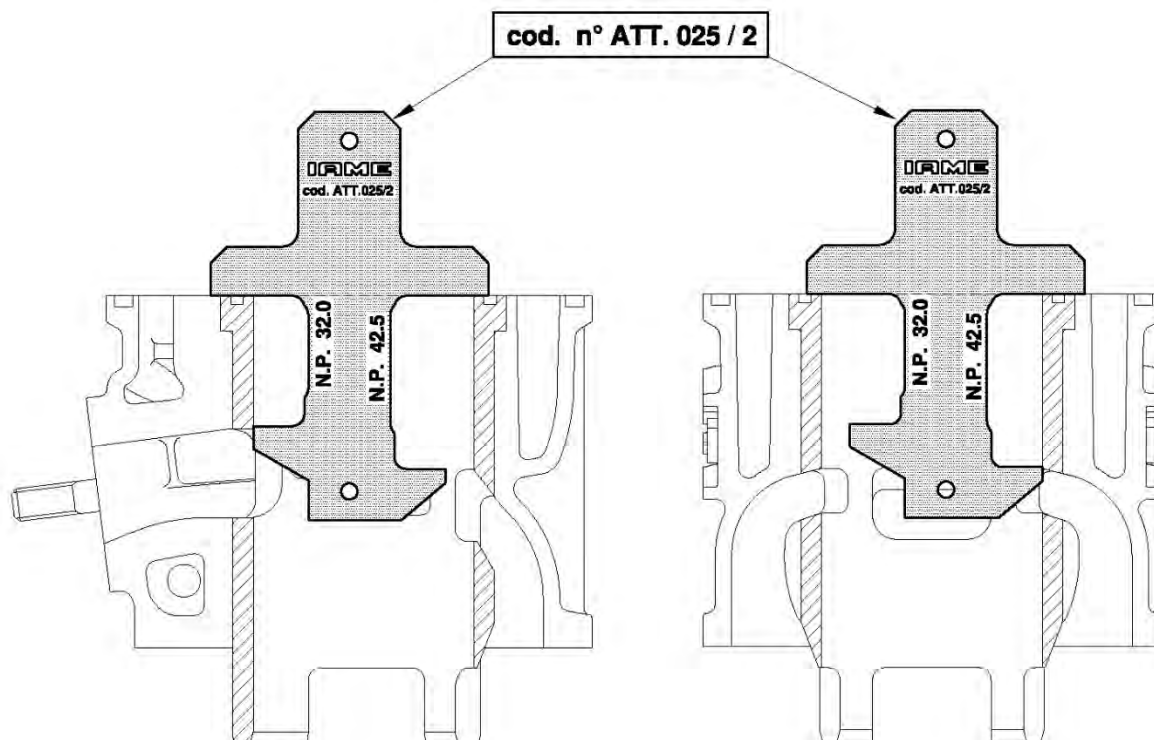
CONTROL OF THE PISTON DOME
CONTRÔLE DU DÔME DE PISTON



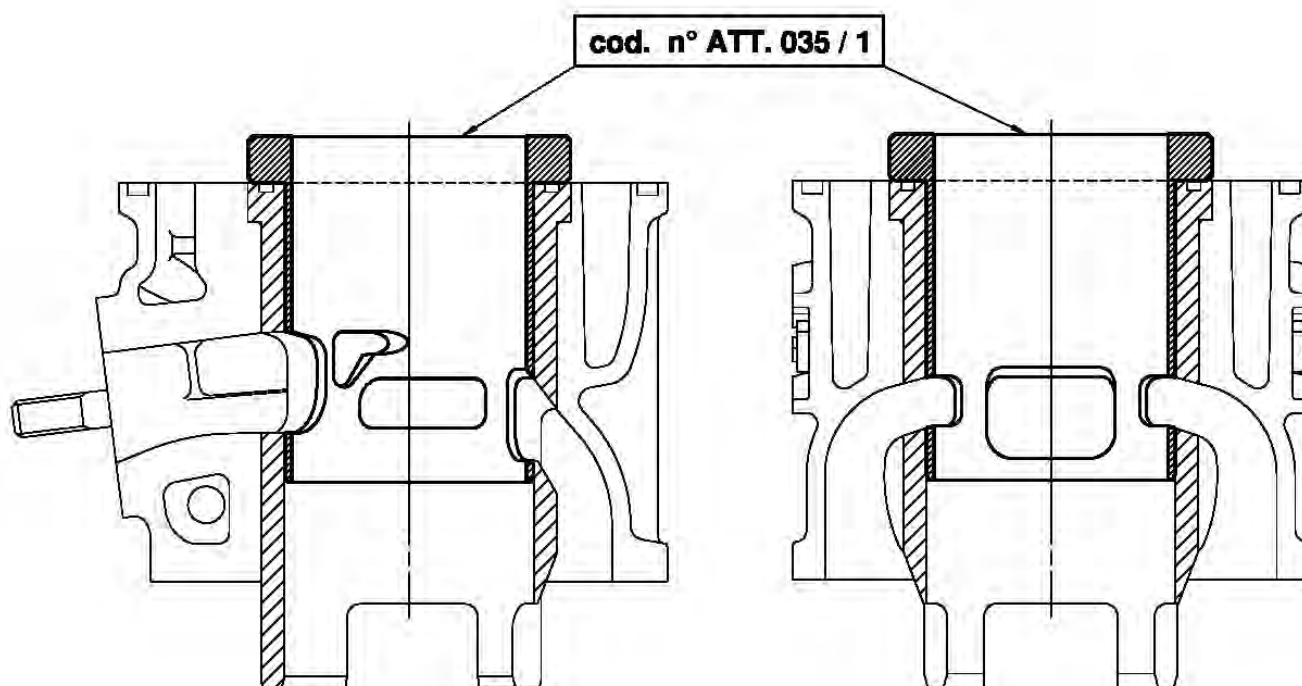
CONTROL OF THE VOLUME OF THE COMBUSTION CHAMBER
CONTRÔLE DU VOLUME DE LA CHAMBRE DE COMBUSTION



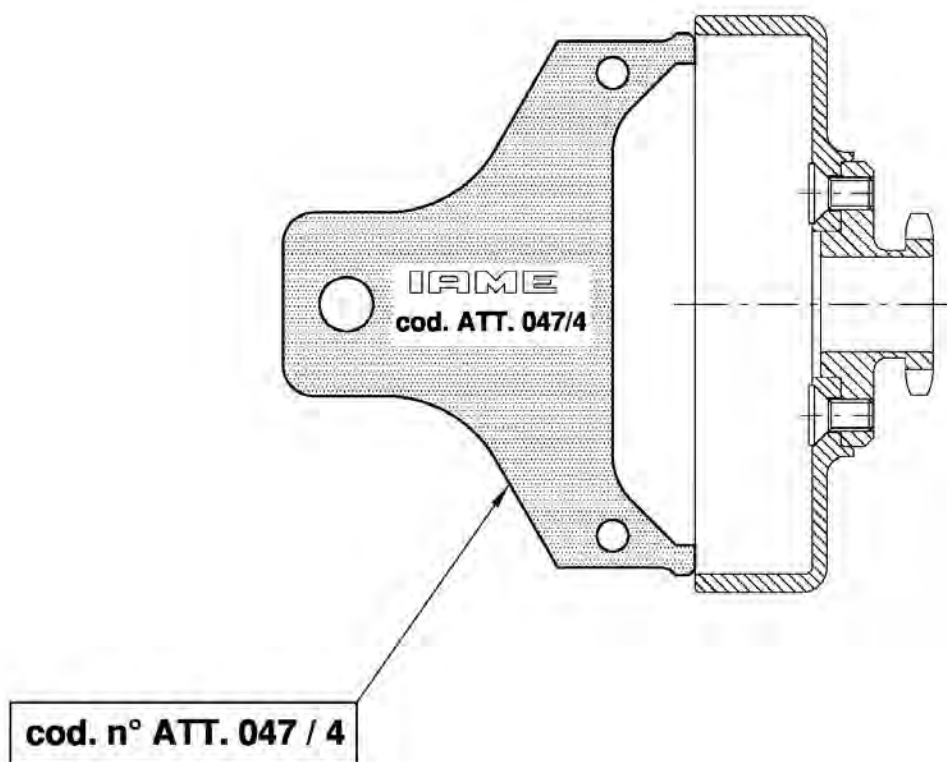
CYLINDER CHECK - CONTRÔLE DU CYLINDRE
CHECKING OF EXHAUST DUCT AND LATERAL TRANSFERS
CONTRÔLE DE LA LUMIÈRE D'ÉCHAPPEMENT ET DES TRANSFERTS LATÉRAUX



CYLINDER LINER DUCTS AND TRANSFERS CHECKING TOOL
OUTIL DE VÉRIFICATION DES LUMIÈRES DE LA CHEMISE DU CYLINDRE

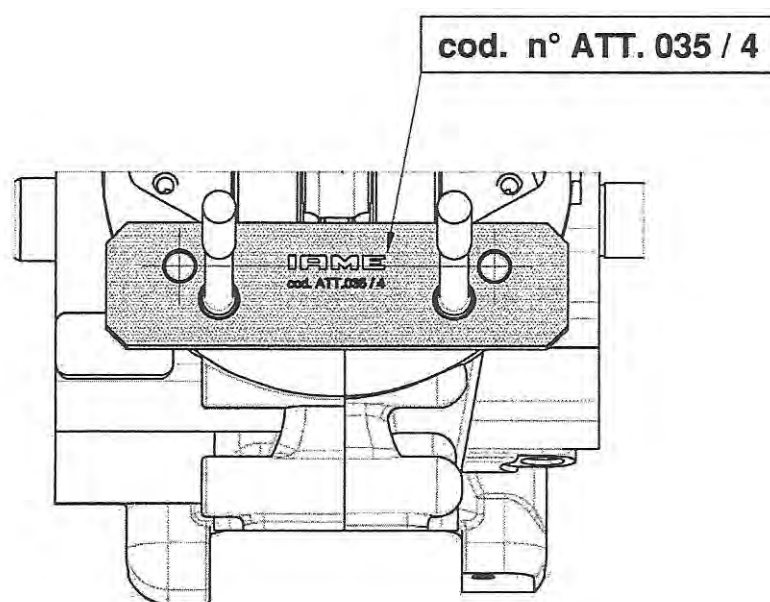


CLUTCH DRUM CHECKING TOOL
CONTRÔLE DE LA CLOCHE D'EMBRAYAGE

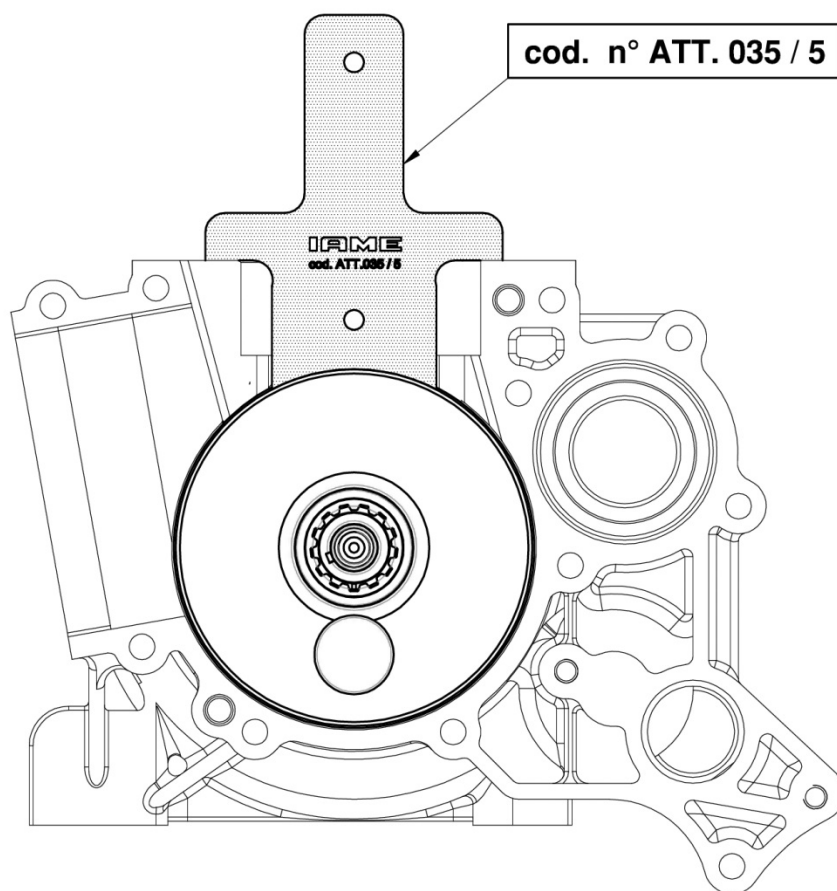


CRANKCASE CHECKING TOOLS - CONTRÔLE DU CARTER

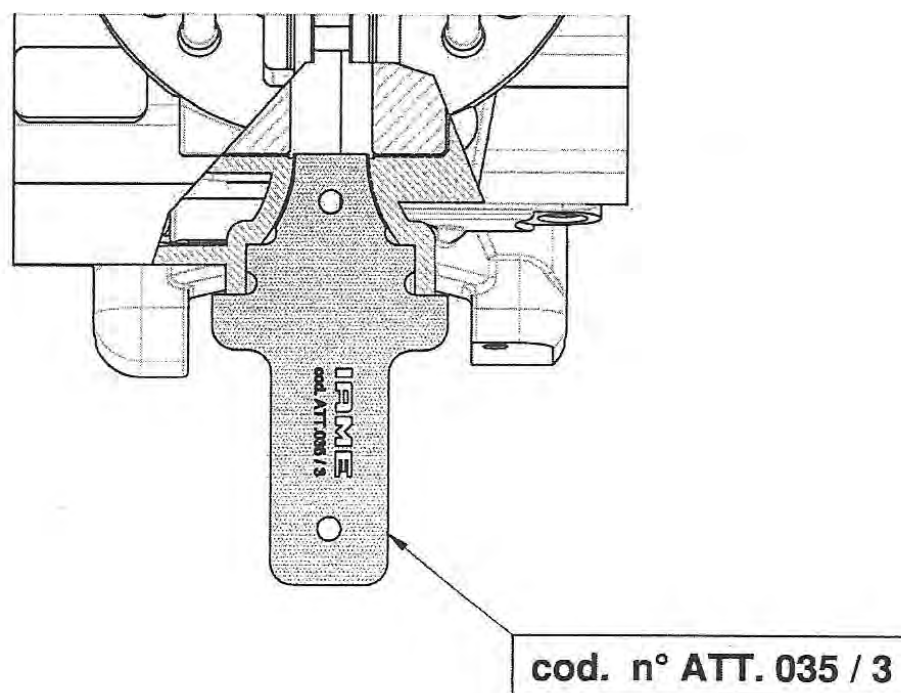
CHECKING THE INTERAXLE OF THE CILYNDER PINS
CONTRÔLE DE L'ENTRAXE DES PIONS DE CENTRAGE DU CYLINDRE



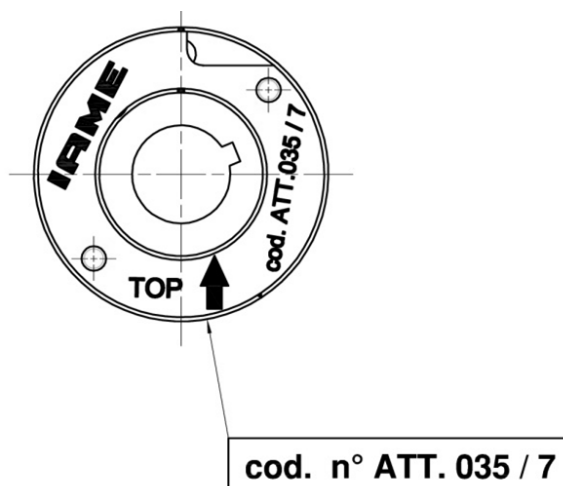
CONTROL OF THE HEIGHT OF THE CRANKSHAFT CYLINDER PLANE
CONTRÔLE DE LA HAUTEUR DU PLAN CYLINDRE SUR LE CARTER



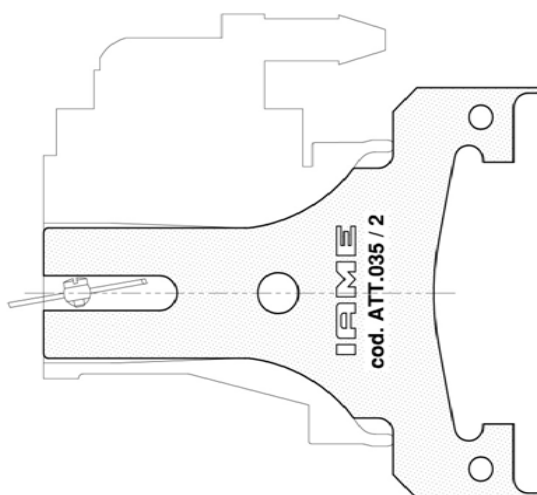
CHECKING OF THE REEDS VALVE PLANE
CONTRÔLE DU PLAN DU LOGEMENT DE LA BOITE À CLAPETS



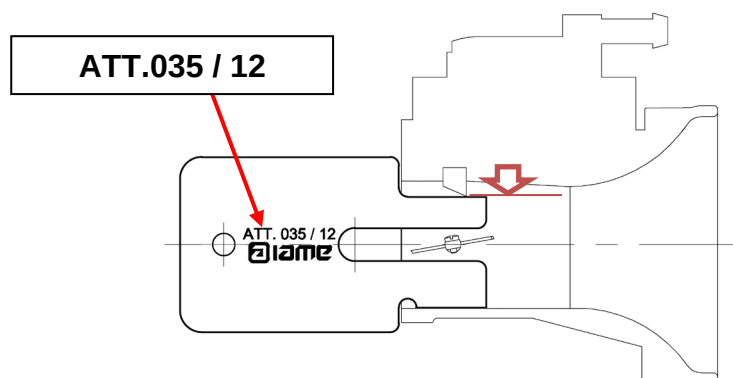
CHECKING OF THE POSITION OF SELETTRA DIGITAL "S" PHASE MARKING
CONTRÔLE DE LA POSITION DU MARQUAGE DE PHASE
 SELETTRA DIGITAL "S"



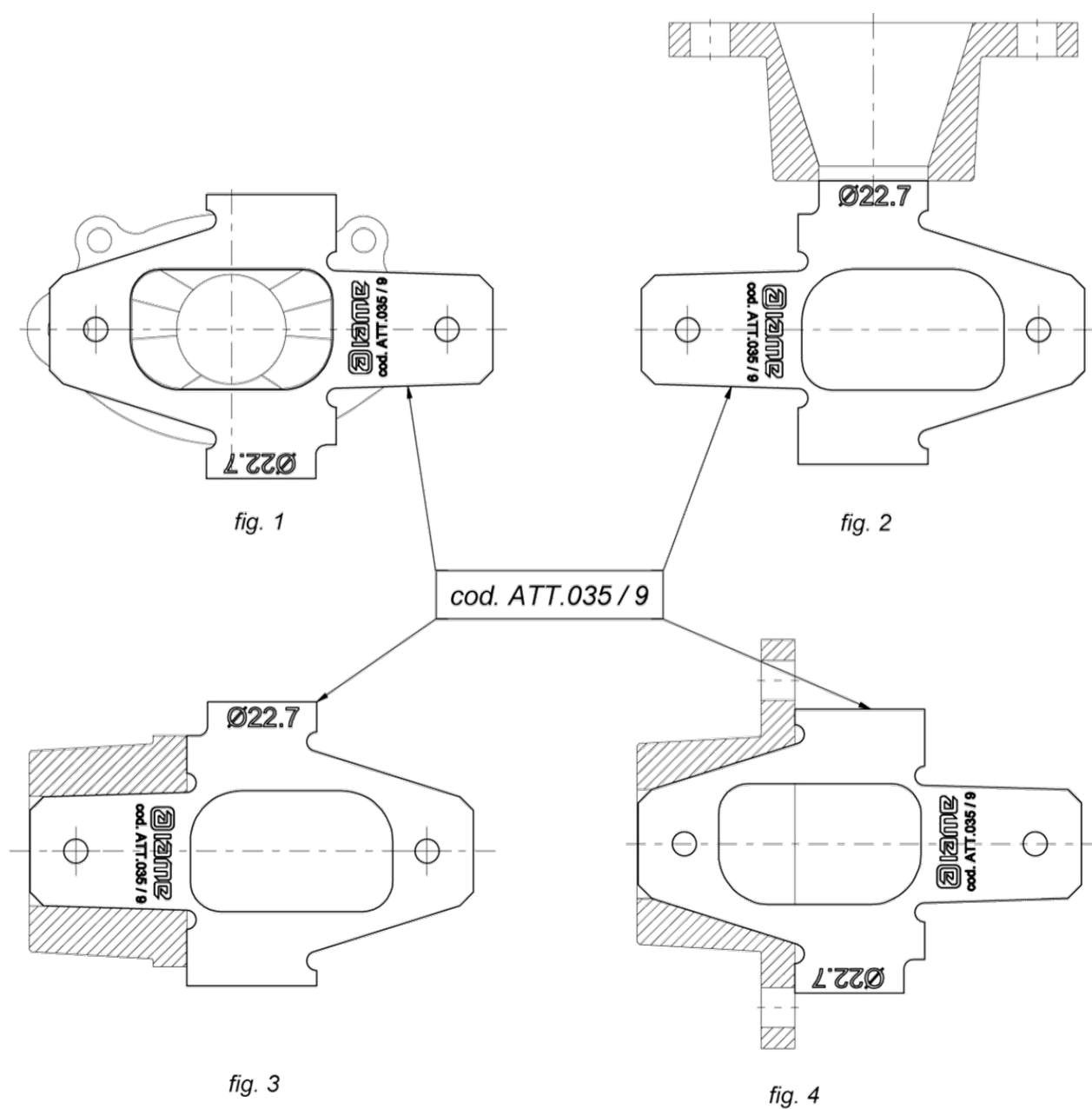
VENTURI SHAPE CONTROL OF TILLOTSON HW-27A CARBURETTOR
CONTRÔLE DU VENTURI DU CARBURATEUR TILLOTSON HW-27A



CHECKING OF THE HEIGHT OF THE ATOMISER – GO IF IT'S OK
CONTRÔLE DE LA HAUTEUR DU PULVERISATEUR
 IL PASSE S'IL EST CONFORME



EXHAUST MANIFOLD CHECKING TOOL - CONTRÔLE DU RACCORD D'ÉCHAPPEMENT



THE NO-GO GAUGE MUST NOT ENTER INTO THE EXHAUST RESTRICTOR, (FIG.2);
VERIFIEZ QUE LE CALIBRE N'ENTRE PAS DANS LE TROU DU RESTRICTEUR D'ÉCHAPPEMENT.

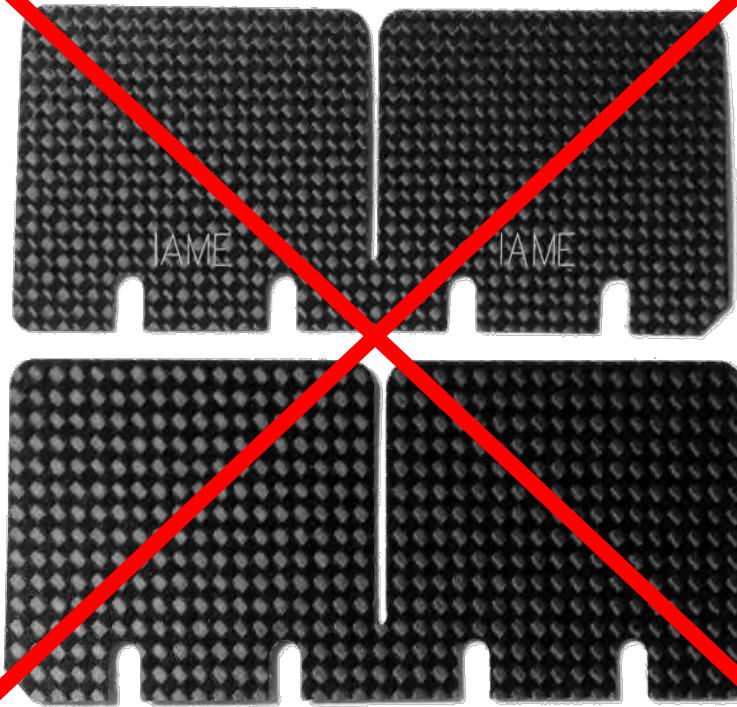
CHECK THAT THE TOOL MATCHES THE SHAPE OF THE EXHAUST MANIFOLD, (FIG.1,3 AND 4).
VERIFIEZ QUE LA FORME DU RESTRICTEUR D'ÉCHAPPEMENT EST LA MEME DE L'OUTIL

NOT ALLOWED CARBON FIBER REEDS
NON ADMIS LES CLAPETS EN FIBRE DE CARBONE

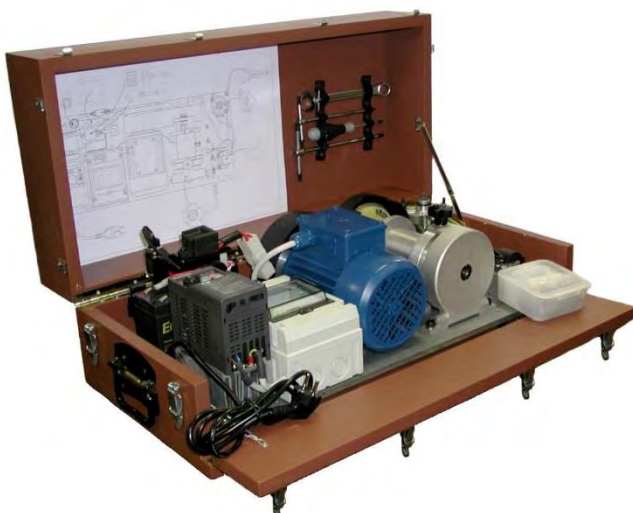
CARBON FIBER / FIBRE DE CARBONE

FRONT SIDE
CÔTÉ AVANT

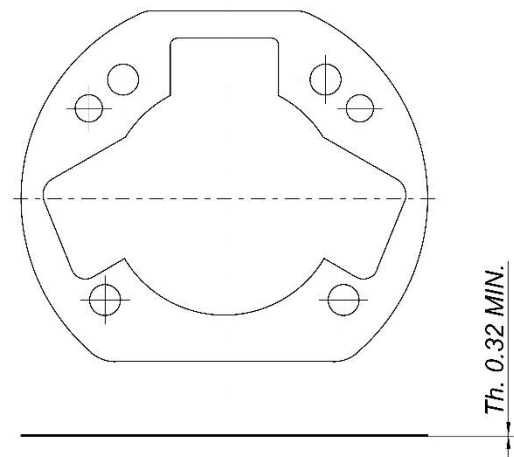
REAR SIDE
CÔTÉ
ARRIÈRE



IGNITION BENCH TESTER
BANC D'ESSAI ALLUMAGE



CYLINDER GASKET
JOINT CYLINDRE



ONLY ONE GASKET ALLOWED
BETWEEN CRANCASE AND CYLINDER
UN SEUL JOINT PERMIS ENTRE CARTER ET CYLINDRE



CARBURETTOR

TILLOTSON HW-27A



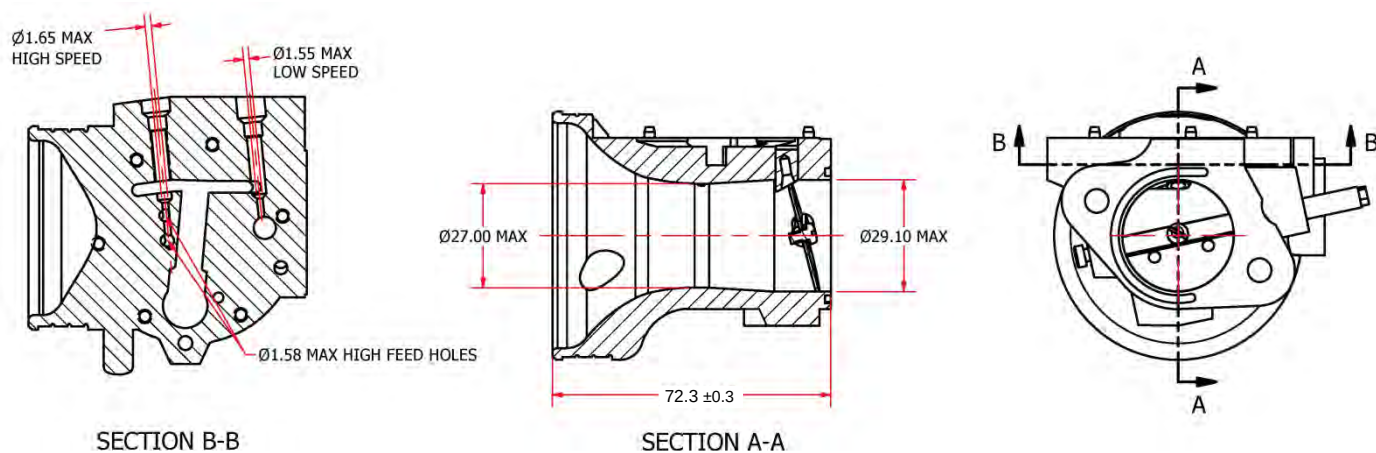
PHOTO OF ADJUSTING SIDE



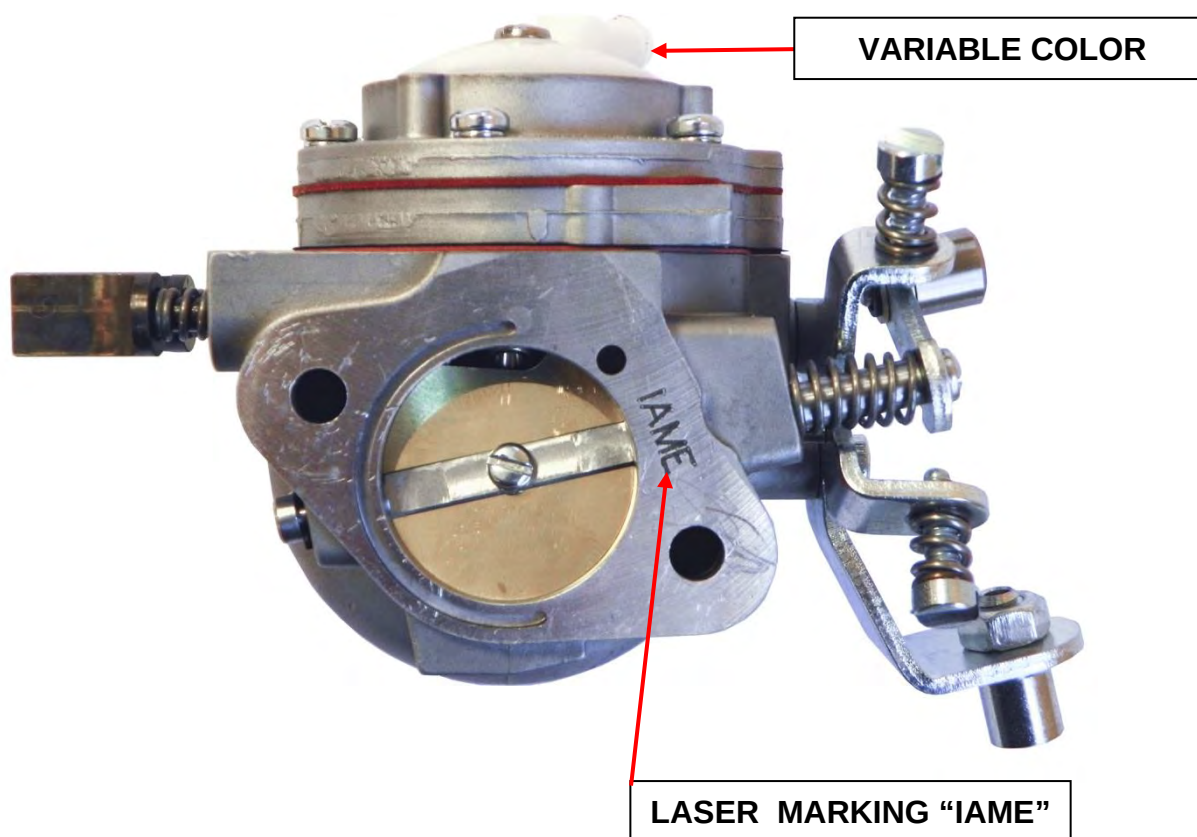
PHOTO OF INLET SIDE

Manufacturer	TILLOTSON LTD.
Make	TILLOTSON
Model	HW-27A

SECTION VIEW

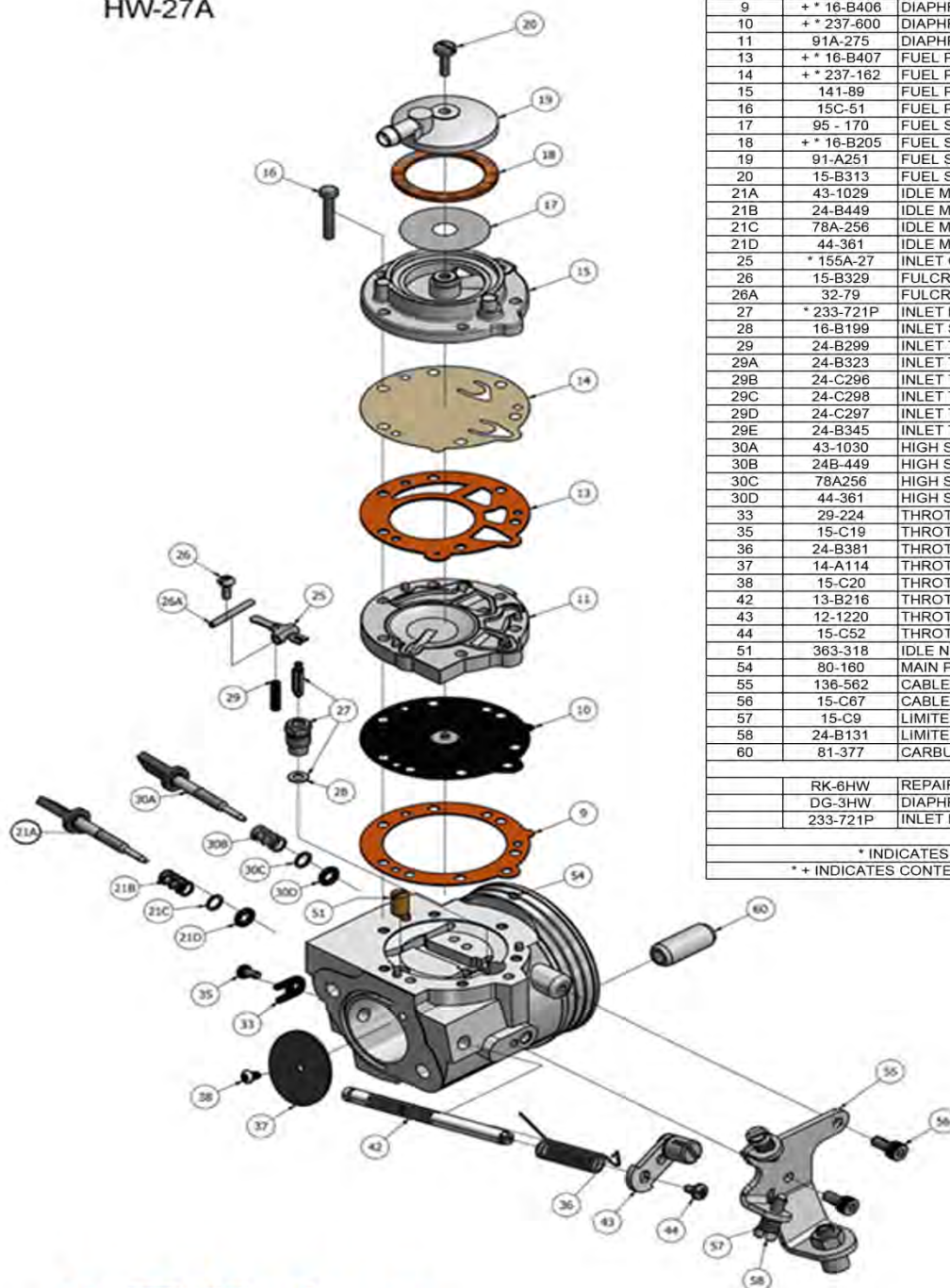


MARKING



CARBURETTOR DESCRIPTION AND SKETCH OF PARTS

HW-27A



ITEM	PART NO.	DESCRIPTION	QTY
9	+ * 16-B406	DIAPHRAGM GASKET (ORANGE)	1
10	+ * 237-600	DIAPHRAGM	1
11	91A-275	DIAPHRAGM COVER	1
13	+ * 16-B407	FUEL PUMP GASKET (ORANGE)	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-B299	INLET TENSION SPRING (STD 37 grams)	1
29A	24-B323	INLET TENSION SPRING (28 grams)	1
29B	24-C296	INLET TENSION SPRING (31 grams)	1
29C	24-C298	INLET TENSION SPRING (42 grams)	1
29D	24-C297	INLET TENSION SPRING (46 grams)	1
29E	24-B345	INLET TENSION SPRING (48 grams)	1
30A	43-1030	HIGH SPEED MIXTURE SCREW	1
30B	24B-449	HIGH SPEED MIXTURE SCREW SPRING	1
30C	78A256	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-A114	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 (STANDARD)	
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

iame

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

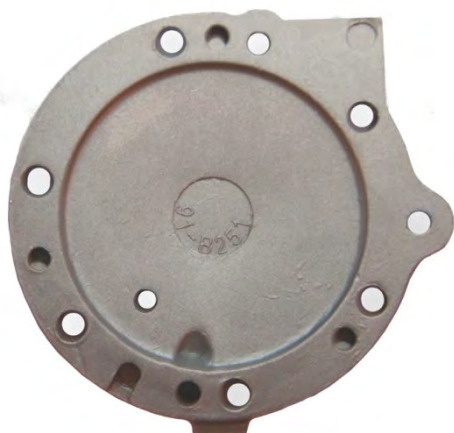
**REF.14 - P. N°237-162
PUMP DIAPHRAGM**

ALTERNATIVE



Thickness = 0.10 ± 0.063 mm

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

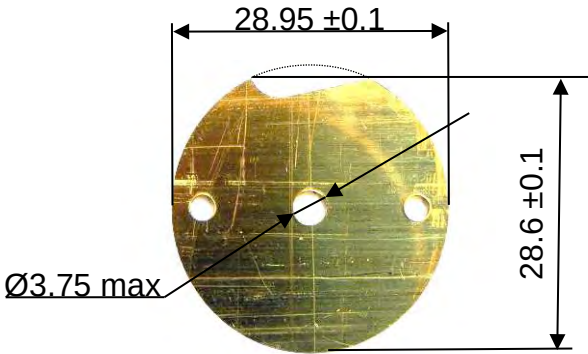
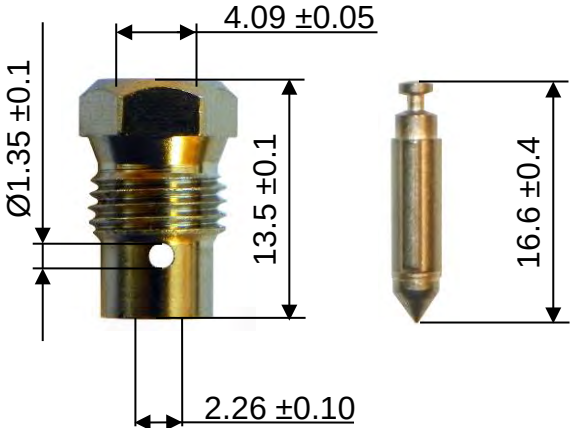
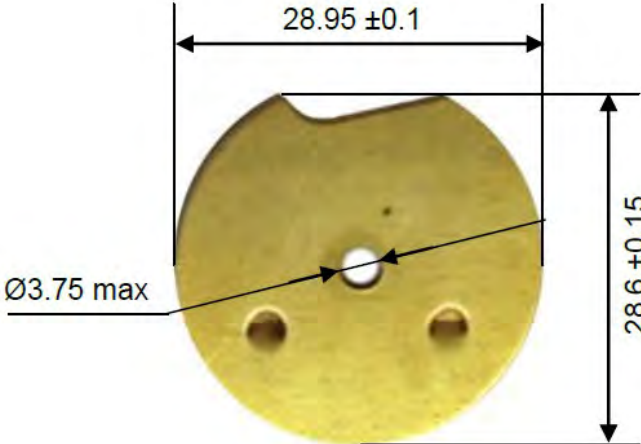


Thickness = 6.75 ± 0.15 mm

**REF.15 - P. N° 141-89
PUMP COVER**

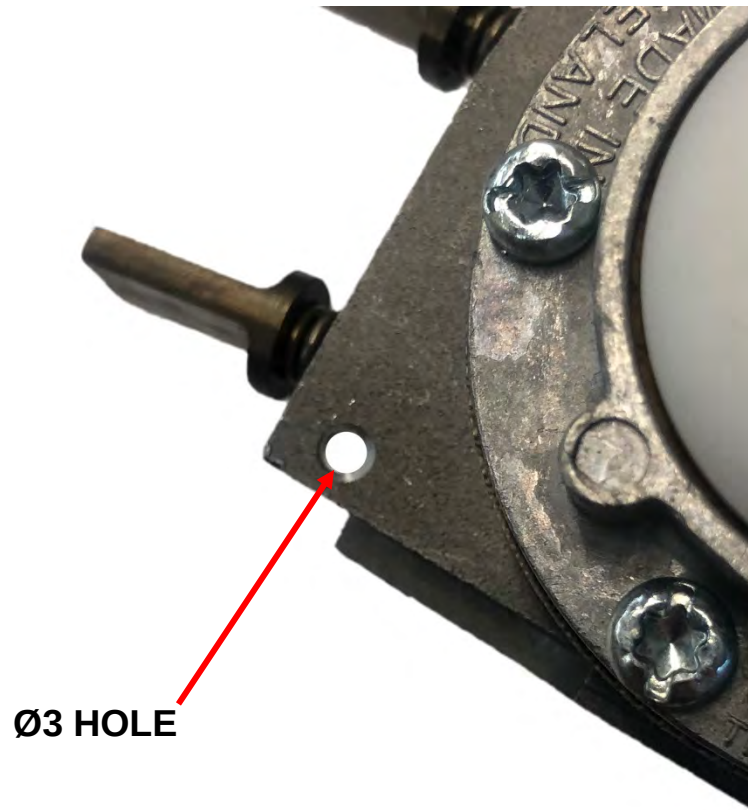


Thickness = 12.5 ± 0.15 mm

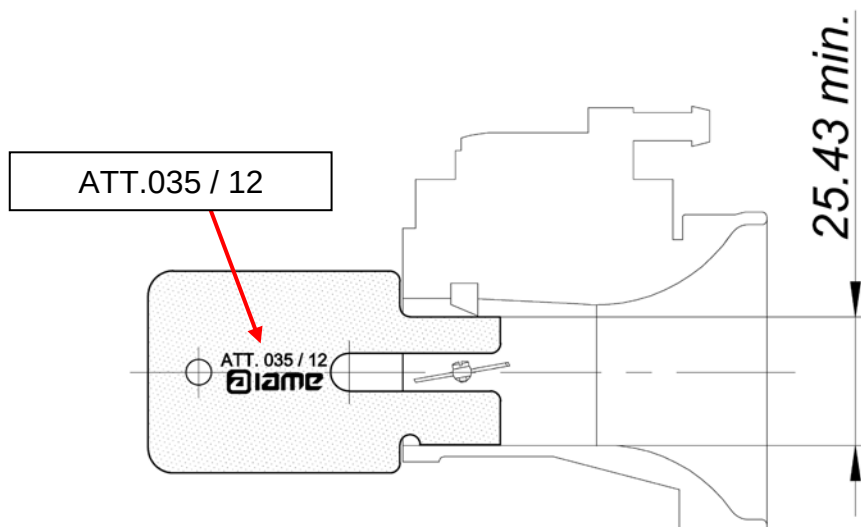
REF.37 - P. N° 14-A114 THROTTLE SHUTTER  Thickness = 0.81 ± 0.1 mm	REF.27 - P. N° 233-721P SEAT + NEEDLE 
REF.21A - P. N° 43-1029 NEEDLE LOW SPEED 	REF.30A - P. N° 43-1030 NEEDLE HIGH SPEED 
ALTERNATIVE THROTTLE SHUTTER (made from production tooling)	ALTERNATIVE FUEL NEEDLE
REF.37 - P. N° 14-A114  Thickness = 0.81 ± 0.1 mm	REF.27 - P. N° 233-721P 

HOLE FOR CARBURETTOR SEALING

The carburettor can have this hole for sealing.



ATOMIZER - HEIGHT LIMITS AND CHECKING TOOL



IAME X30 - TECHNICAL REGULATIONS

1. FUEL

1.1 The oil mixture ratio shall be 4%/6%.

1.2 It is forbidden to add any liquid and/or power-boosting chemicals in the fuel

2. WEIGHT

2.1 X30 Senior: 162 Kg

2.2 X30 Master: 175 Kg

3. INSPECTIONS

3.1 The technical stewards have the right to inspect any part to the point that it can no longer be employed. Inspected parts resulting as regular will be replaced to the driver at no cost. Any part resulting irregular will not be refunded.

3.2 In any moment, the technical officials have the right to replace any part, any accessory or even the entire engine.

3.3 The Promoter, while guaranteeing the perfect efficiency and operation of the supplied material, will in no case be held liable for any malfunction occurring as a result of the replacement.

3.4 The technical forms are the main comparison reference for Scrutineers.

3.5 In case of doubts on the engine parts conformity, the comparison with the sample engine will be the definitive probating element.

3.6 In case of extremely controversial events during engines scrutineering, the Scrutineers can decree the delivery of the concerned part, duly sealed, to IAME S.p.A. for an accurate inspection at the factory at the presence of representatives of the Entrant and the Sporting Authority (ASN).

3.7 Controls can be carried on the engines, in race conditions, at any time of the Event.

4. ENGINE IAME X30 125cc RL TaG - X30 SENIOR - X30 MASTER

4.1 Any modification on the engine and its accessories is strictly forbidden, if not expressly authorized.

4.2 IAME considers as modifications any action changing the initial aspect and dimensions of an original part. Any modification and/or installation having as a consequence to alter a dimension and/or its control possibility is strictly forbidden. Polishing, sandblasting, trimming or adjustments are not allowed.

4.3 No heat treatment or surface treatment are allowed. The Entrant is liable for the conformity of its own equipment.

4.4 Only the IAME X30 125cc-RL-TaG, original and strictly in compliance with the manufacturer's technical form (technical features, sizes, weights, diagrams with the tolerances prescribed by the manufacturer) is admitted.

4.5 The pictures on the original homologation forms are as well valid to identify the engine and the parts.

4.6 The engines must be provided with their original serial number.

4.7 No modification, improvement, polishing, addition or removal of material of any engine part is allowed.

4.8 Each engine internal or external part has to be installed in its original position and functioning according to the original design specs.

4.9 The tolerances reported on homologation form are necessary to comprise all the machining, assembling and settling tolerances.

4.10 The Entrant is absolutely not allowed to make any intervention on the engine, even if the characteristic dimensions after his intervention will still be within the prescribed tolerances.

4.11 Any tuning is forbidden: the maximum and minimum allowed values and the volume of the combustion chamber have to be measured according to the CIK/FIA Karting Technical Regulations.

4.12 Diagrams and volume chart : refer to engine homologation form

4.13 All the templates described in the engine technical form of the engine and available to the Technical Stewards, are to be considered valid and certified by the Manufacturer instruments in order to determine the conformity of the part whose control they are designed for.

5. CYLINDER HEAD

5.1 The cylinder head has to be strictly original.

5.2 Only the thread repairing by means of an M14 x1,25 helicoil of the same length as the original thread is allowed. The sparkplug body tightened on the cylinder head must not protrude from the upper part of the combustion chamber dome.

5.3 The squish minimum value must be in compliance with the engine technical form prescription at all points.

5.4 The tin wire (50% tin minimum.) used for the squish measurement must have a 1,5mm diameter. Measurements must be taken with the engine in racing conditions and at ambient temperature.

5.5 The original IAME gauge n. ATT-025/1 is the reference to check the cylinder head profile conformity. The gauge shape must match with the dome profile, the squish area and the gasket plane.

5.6 The CIK insert body tightened on the cylinder head, must not protrude from the upper part of the combustion chamber dome.

6. CYLINDER

6.1 Strictly original and provided with the security pin and original IAME markings.

6.2 Polishing, sandblasting, trimming or adjustments are not allowed.

6.3 Only re-boring is allowed. In case of doubt, the shape and the height of the transfers have to be compared to the cylinder of the sample engine.

6.4 No heat treatment or surface treatment are allowed.

6.5 The number of cylinder gaskets is limited to ONE. Only IAME original gaskets allowed. Minimum thickness is 0,32

6.6 No head gasket is admitted.

6.7 The original IAME gauge n. ATT-025/2 is the reference to measure the cylinder ports position.

6.8 The original IAME gauge n. ATT-035/1 is the reference to carry a visual check of the ports.

7. CRANKCASE, CRANKSHAFT, CON-ROD, CRANKPIN

7.1 Strictly original and without any modification.

7.2 The original IAME gauge ATT-035/3 is the reference to check the reed block housing plane

7.3 The original IAME gauge ATT-035/4 is the reference to check the distance between the indexing pins of the cylinder

7.4 The original IAME gauge ATT-035/5 is the reference to check the height of the cylinder base plane

7.5 Only original big end cage (X30125431), small end cage (E-10440/E-10441) and original washers (X30125436/X30125437) allowed.

7.6 Oil seals must be installed in the correct position, cave side looking inside the crankcase.

8. BEARINGS

8.1 Only crankshaft ballbearings 6206 C4 or crankshaft roller bearings SKF BC1-3342 B and balance shaft 6202 C3/C4/C4H and 6005 C3/C4 steel ball and polyamide cage are allowed.

8.2 Oblique contact prohibited.

8.3 Ceramic balls prohibited.

8.4 The bearings must be mounted with balls visible from the inside of the crankcase

9.5 All bearings not reporting the correct and clearly visible classification number, as described in the present regulations, are expressly forbidden.

9.6 The use of spacer shims behind the bearings is allowed to obtain the correct axial clearance.

9.7 All internal parts of the engine must be of manufacturer origin, the same number as the assembly of the factory and mounted in the same direction.

10. PISTON, RING AND PIN

10.1 Strictly original without any modification and in compliance with the engine technical form.

10.2 The IAME original gauge ATT-035/2 is the reference to check the piston head shape.

11. REED BLOCK

11.1 Strictly original without any modification.

11.2 No gasket planes machining is allowed.

11.3 Original reed valve cover without any modification is allowed.

11.4 Reed block/crankcase gasket thickness is 1mm (admitted tolerance +/- 0.3mm).

11.5 Conveyor/reed block gasket thickness is 0.8mm (admitted tolerance +/- 0.3mm).

12 REED PETALS

12.1 Only Fiberglass (min. thickness 0.30mm) original IAME marked reed petals are allowed.

12.2 Use of Carbon fibre is forbidden.

13. CARBURETTOR

13.1 Only the Tillotson HW-27A carburettor supplied together with the engine in its original configuration (same brand, same model, same reference) is admitted.

13.2 Only the accessories supplied together with the original carburettor and represented on the carburettor technical form are allowed.

13.3 Needle valve spring is free.

13.4 Carburettor positioning (i.e. with pump in upper or in lower position) is free.

13.5 Carburettor gasket thickness is 1 mm (admitted tolerance +/- 0.3mm).

13.6 The original IAME gauge n. ATT-035/2 is the reference to check the carburettor inlet duct. The gauge shape must match with the inlet profile.

14. INLET SILENCER

14.1 The inlet silencer (p.n. X30125740) must be identical to the original one supplied together with the engine (same brand, same model, same reference) with max. 22mm diameter intake tubes.

14.2 Protective grids are optional.

14.3 The rubber manifold with air filter connecting the inlet silencer to the carburettor is mandatory and must be installed and in compliance with the homologation form.

14.4 Any injection and/or spraying system is forbidden.

14.5 The "old" inlet silencer is allowed to use until 31.12.2020. All size and info is included in the Fiche.

15. CLUTCH

15.1 The centrifugal clutch must engage at max. 4.000 RPM moving the kart with driver on board and in racing conditions.

15.2 The clutch must be completely triggered at max. 6.000 RPM in any condition, this measurement can eventually be checked with proper instruments.

15.3 Each driver will be responsible for the wear status of the clutch padding material and friction parts cleaning.

15.4 The proper clutch operation might be checked at any moment of the event, and even after each phase.

15.5 The original IAME gauge ATT-047/4 is the reference to check the clutch drum. The tool must not enter into the clutch drum in perpendicular position respect to the clutch drum axis.

16. IGNITION

16.1 Only original ignitions, either Selettra Digital "K" or Selettra Digital "S" systems are allowed, without any modification.

16.2 Scrutineers have the right to ask for the replacement of the whole ignition system or part at any moment before starting the race.

16.3 The organizer will not be liable for any eventual breakdown occurred after the replacement.

16.4 Only the electronic CDI box type "C" (16000 RPM) is allowed and must be fixed on the chassis or on the engine.

16.5 The markings on the electronic box are compulsory and must be clearly visible without disassembling the electronic box. Covering with adhesive or masking tape is forbidden.

16.6 Modifications on the stator fixing, on the shape and thickness of the rotor key and on the rotor and crankshaft slots are forbidden.

16.7 The IAME original gauge ATT-035/7 is the reference to check the correct position of the phase reference marking on the rotor.

16.8 The battery must be fixed to the chassis and always connected to the ignition system.

17. SPARKPLUG

17.1 Only the NGK BR9EG - BR10EG - BR9EIX - BR10EIX - R6254E-105 - R6252K-105 sparkplugs are allowed, strictly original and without any modification.

17.2 The sparkplug must be installed with its original gasket.

17.3 The insulator must not exceed the sparkplug body and the length of the sparkplug body itself must be max. 18,5 mm. (CIK technical regulations appendix 7).

17.4 Original spark plug cap, as delivered with the engine (IAME p.n. 10544).

18. EXHAUST

18.1 Only the original muffler and exhaust manifold as supplied with the engine are allowed and must be kept strictly original and in compliance with the homologation form. No modification in structure or in dimensions is allowed.

18.2 Drilling and welding operations on the muffler are allowed only to install a temperature probe.

18.3 The complete sealing of the exhaust gas between the cylinder and the exhaust manifold must be guaranteed at all times.

18.4 The control of the sealing of the exhaust gas can be performed at any time through occlusion of the outlet hole of the exhaust manifold, filling of the exhaust manifold with liquid through the exhaust port and check for leaks.

18.5 The proper sealing of the exhaust system is at Driver's responsibility.

18.6 One original gasket only between cylinder and exhaust manifold is allowed.

18.7 The use of the original exhaust spacer is allowed and not mandatory, then also one extra original gasket can be used. Totally two gaskets are then allowed.

18.8 The use of the original 22.7mm restricted exhaust manifold as described in the tech form is allowed and not mandatory. No modifications allowed.

18.9 The use of the exhaust silencer X30125723-K is allowed and not mandatory.

19. COOLING

19.1 The cooling system must be in its original configuration: only one IAME original radiator (p.n. T-8000B), only one IAME original simple water pump (aluminium or plastic black/blue)

19.2 Only one IAME original water pump pulley (aluminium or plastic black/blue) are allowed and in compliance with the homologation form.

19.3 The number of radiator support brackets is not limited.

19.4 Only original IAME thermostats are allowed and their use is optional. The thermostat case can be installed without the thermostat capsule inside, and work as a fitting.

19.5 Only water with no other additive is allowed for cooling.

19.6 Radiators shields, either adhesive or mechanic are allowed but should not be removable when the kart is in motion. If the shield demands it you can use optional support to the radiator.

19.7 Water pump driving belt type is free.

19.8 Belt must operate on the water pump pulley.

20. STARTING

20.1 The engine is provided with an on board electric starter.

20.2 The original on board starting system has to be installed with all its components and properly connected and functioning.

21. SPROCKETS

21.1 Only IAME original Z10/Z11/Z12/Z13 sprockets are admitted.

IAME X30 – SPORTING REGULATIONS

1. Gruppering av klassen X30

1.1 Klassen X30 blir delt inn i to grupperinger.

1.2 X30 Senior er grupperingen som blir kjørt på alle nasjonale løp med mindre arrangøren sier noe annet i sine tilleggsregler.

1.3 X30 Senior følger NBF sin alders besetemelse. Fra og med det året man fyller 14 år

1.4 X30 Master kjøres kun om det blir opplyst i tilleggsreglene.

1.5 X30 Master kan kjøre fra og med det året man fyller 24 år