
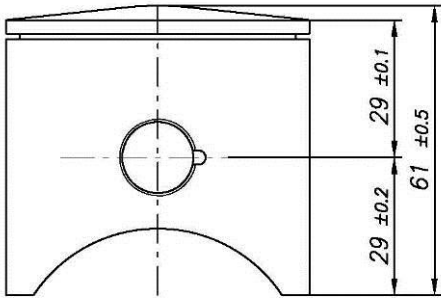
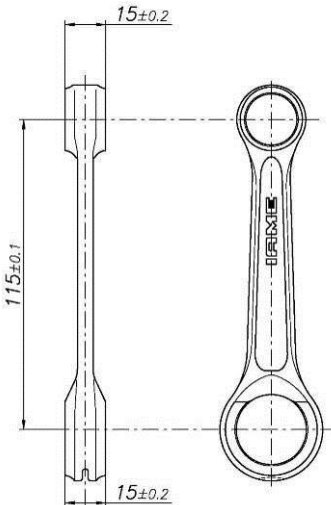
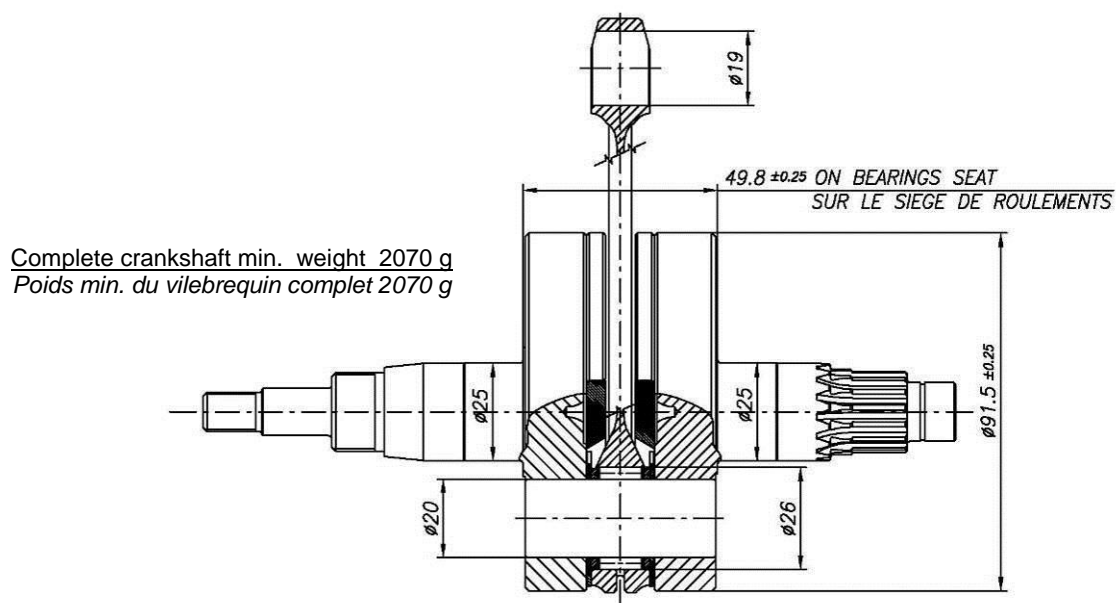


# **SUPER SHIFTER - 175cc - TaG**

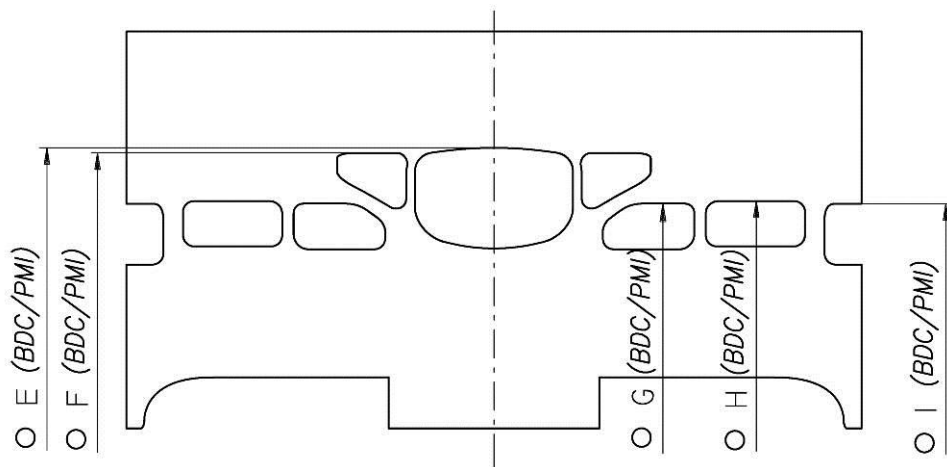
		FEATURES - CARACTERISTIQUES	
		Cylinder volume <i>Volume du cylindre</i>	174.56 cm <sup>3</sup> <b>(Max 176.6 cm<sup>3</sup>)</b>
		Bore <i>Alésage</i>	63.90 mm
		Max. theoretical bore <i>Alésage théorique max.</i>	64.26 mm
		Stroke <i>Course</i>	54.40 mm
		Distance between conrod centers <i>Longueur (entre axe) de la bielle</i>	115 mm
		Cooling system <i>Système de refroidissement</i>	Water <i>Eau</i>
		Inlet system <i>Système d'admission</i>	Reed valve <i>À clapets</i>
Carburetor <i>Carburateur</i>	Dell'Orto VHSB 36-RD	Cylinder / crankcase transfers n° <i>N° de canaux cylindre / carter</i>	5 / 3
Number of piston rings <i>Nombre de segments</i>	1	Inlet / exhaust ports number <i>N° lumières admiss. / échapp.</i>	5 / 3
Big end conr. bearing diam. <i>Diamètre palier tête de bielle</i>	20x26x15	Combustion chamber shape <i>Forme chambre de combustion</i>	Spherical <i>Sphérique</i>
Crankshaft bearing diam. <i>Diamètre palier du vilebrequin</i>	25x52x15 (2Pc.) 15x35x11 (1Pc.)	Ignition <i>Allumag</i>	Digital "S"
Small end conr. bearing diam. <i>Diamètre palier pied de bielle</i>	15x19x20	Electric starter <i>Démarrreur électrique</i>	Yes <i>Oui</i>

DESCRIPTION OF THE MATERIAL DESCRIPTION DES MATERIAUX		PISTON
Conrod material <i>Matériel de la bielle</i>	Steel <i>Acier</i>	 <p>Piston min. weight (ring incl.) 155 g <i>Poids min. piston (avec segment) 155 g</i></p>
Crankshaft material <i>Matériel du vilebrequin</i>	Steel <i>Acier</i>	
Gearbox shafts material <i>Matériel de l'arbres de boîte de vitesses</i>	Steel <i>Acier</i>	
Gears material <i>Matériel des engrenages</i>	Steel <i>Acier</i>	
Starter ring material <i>Matériel de la couronne démarr.</i>	Steel / Acier or / ou Aluminium	
Head material <i>Matériel de la culasse</i>	Aluminium	DISTANCE BETWEEN CONROD CENTERS <i>ENTRE AXE DE LA BIELLE</i>
Cylinder material <i>Matériel du cylindre</i>	Aluminium	 <p>Min. Weight 112 g <i>Poids min. 112 g</i></p>
Liner material <i>Matériel de la chemise</i>	Iron <i>Fonte</i>	
Crankcase material <i>Matériel du carter</i>	Aluminium	
Piston material <i>Matériel du piston</i>	Aluminium	
Piston rings material <i>Matériel des segments</i>	Iron <i>Fonte</i>	
Exhaust muffler material <i>Matériel du pot d'échappement</i>	Sheet-steel <i>Tôle acier</i>	

### CRANKSHAFT – VILEBREQUIN



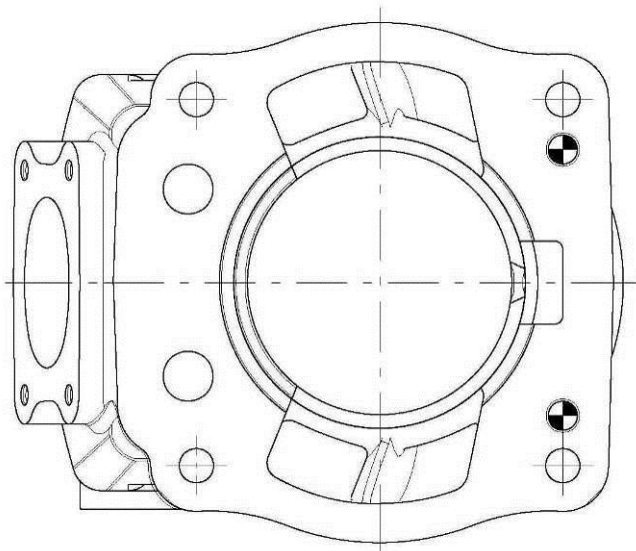
CYLINDER DEVELOPMENT - DEVELOPPEMENT DU CYLINDRE



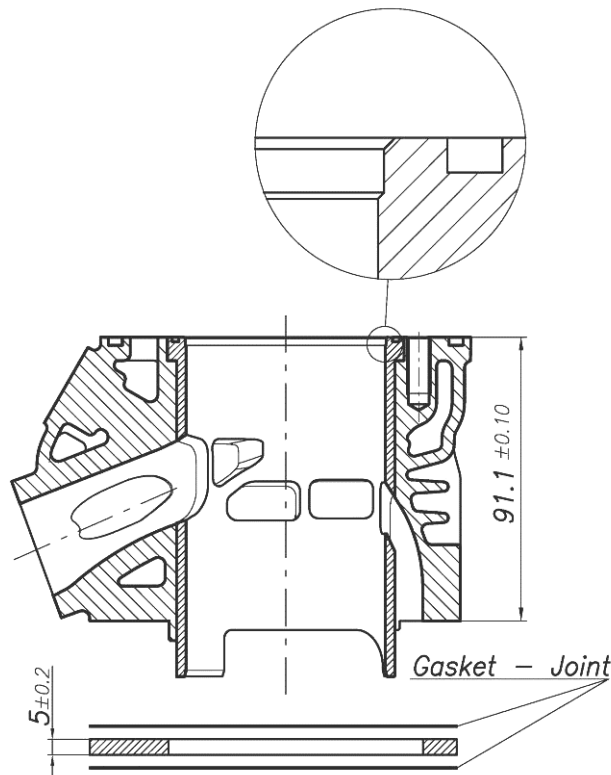
E	$195^\circ \pm 2^\circ$
F	$189^\circ \pm 2^\circ$
G	$122.5^\circ \pm 2^\circ$
H	$125.5^\circ \pm 2^\circ$
I	$121^\circ \pm 3^\circ$

○ ANGULAR READING BY INSERTING A 0.2x5mm GAUGE  
LECTURE ANGULAIRE PAR INSERTION D'UNE CALE DE 0.2x5mm

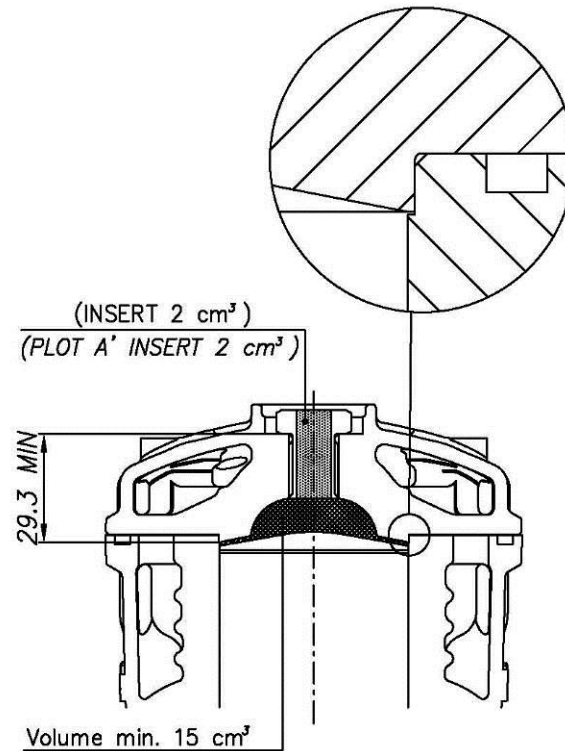
CYLINDER BASE VIEW  
VUE DE LA BASE DU CYLINDRE



CYLINDER CROSS SECTION VIEW  
VUE EN SECTION DU CYLINDRE



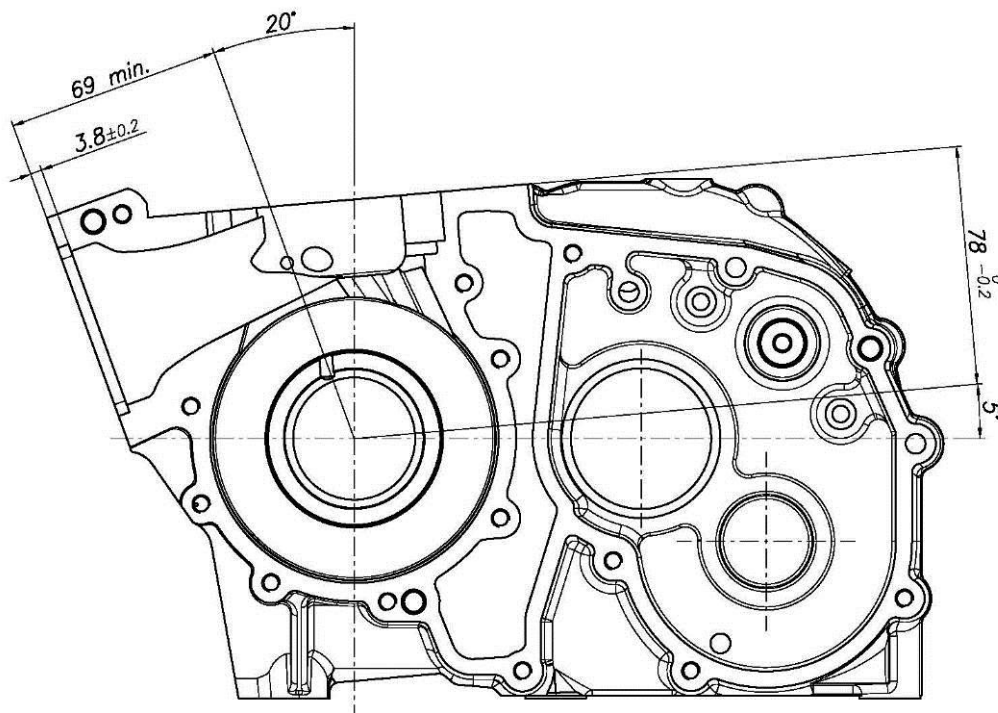
COMBUSTION CHAMBER VIEW  
VUE DE LA CHAMBRE DE COMPRESSION



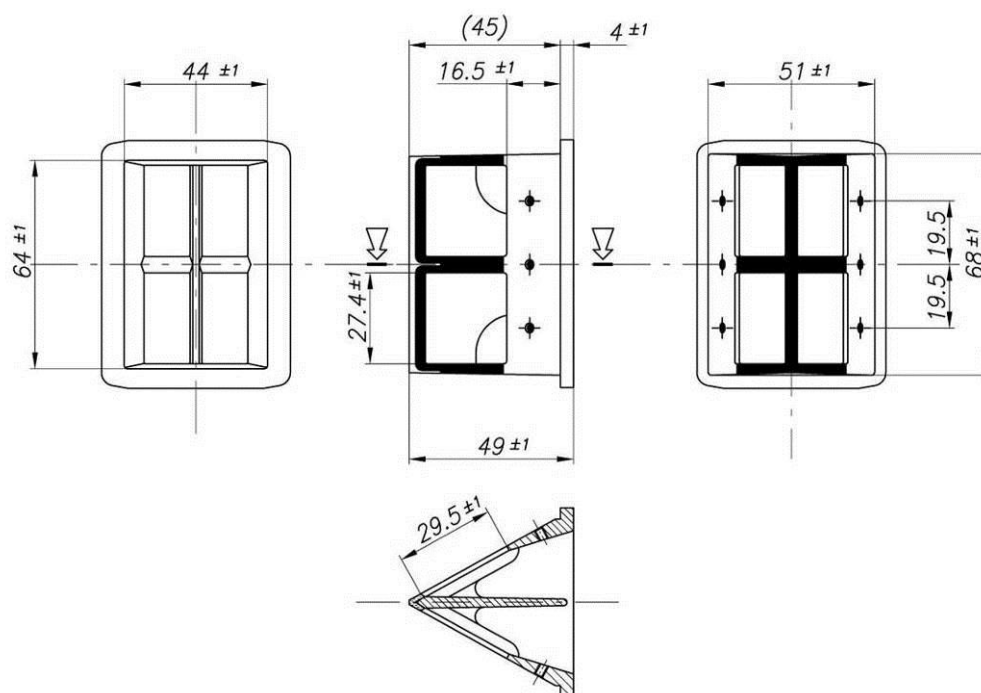
COMBUSTION CHAMBER VOLUME TOT. = 17 cm<sup>3</sup> min.  
VOLUME CHAMBRE COMBUSTION TOT. = 17 cm<sup>3</sup> min.

SQUISH MIN. = 1 mm  
(measured with Ø1.5mm TIN - mesurée avec de l'étain Ø1.5mm)

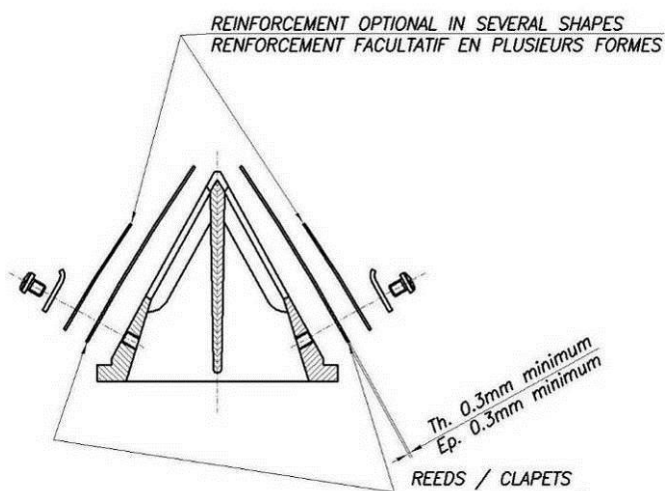
CRANKCASE INSIDE VIEW  
VUE A' L' INTERIEUR DU CARTER



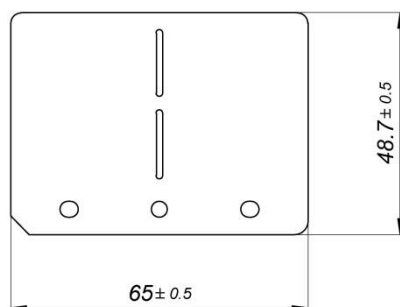
## REED VALVE BOÎTE À CLAPETS



## ASSEMBLY OF REED VALVE DESSIN D'ENSEMBLE DE LA BOÎTE À CLAPETS



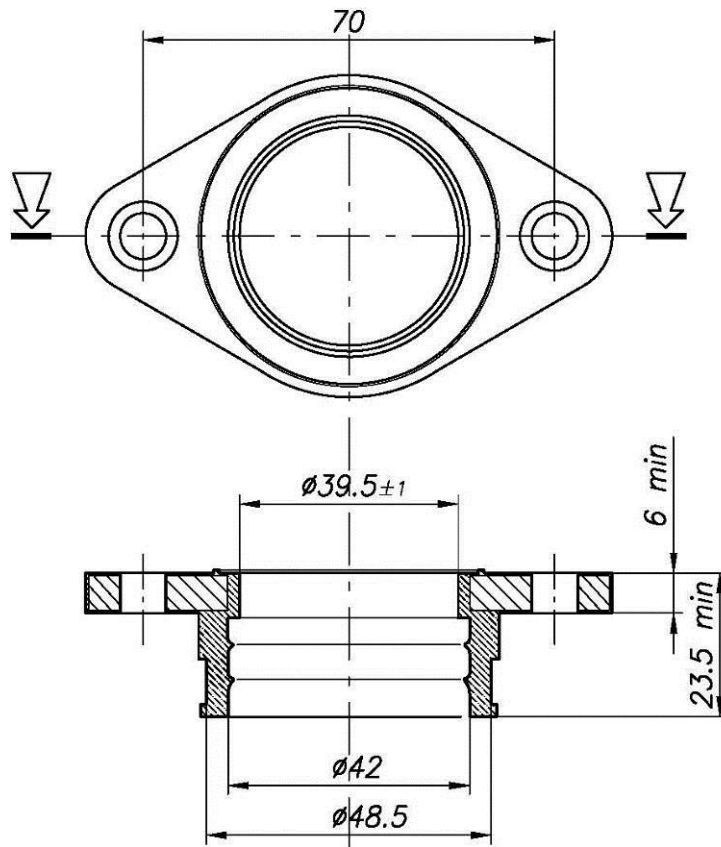
### REEDS / CLAPETS



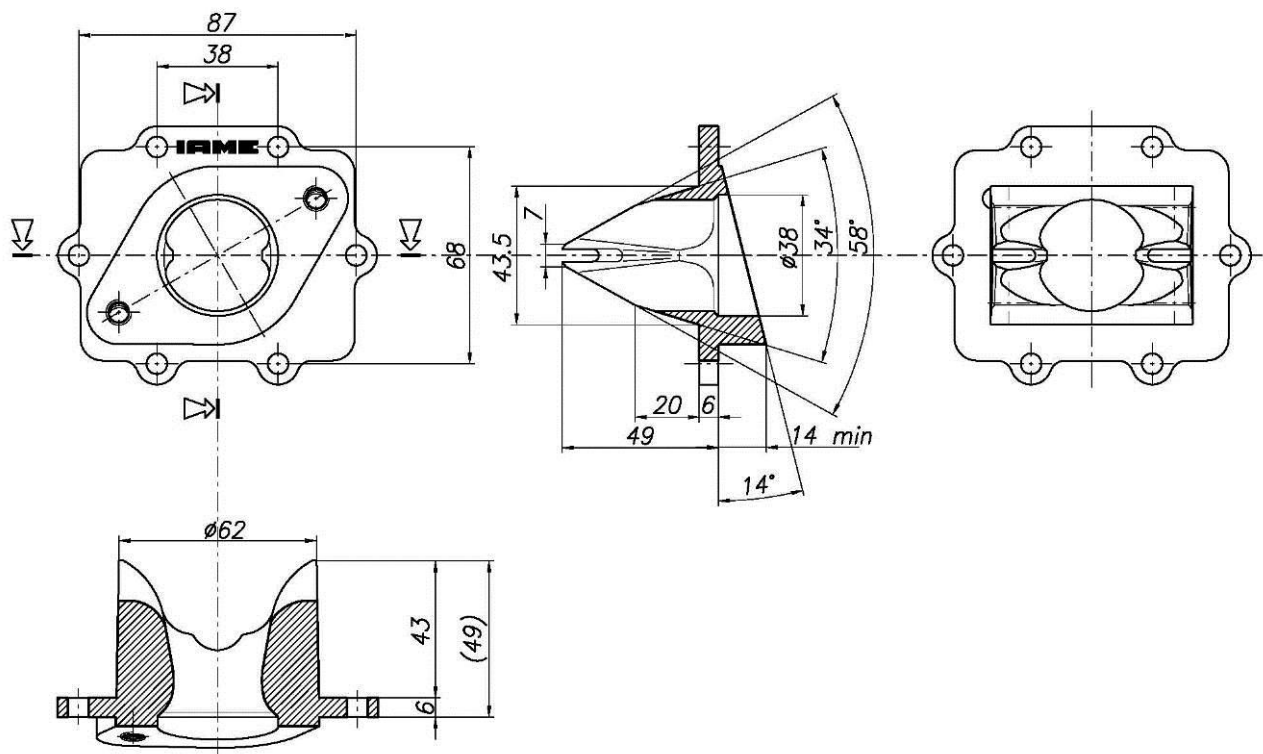
**N.B.: ONLY REED "IAME" GENUINE CARBON FIBER ARE PERMITTED.**

**N.B. : SEULS LES CLAPETS D'ORIGINE "IAME" EN FIBRE DE CARBONE SONT AUTORISES.**

CARBURETOR FITTING RUBBER  
RACCORD DU CARBURATEUR EN CAOUTCHOUC



REED VALVE COVER  
COUVERCLE DE LA BOÎTE A CLAPETS

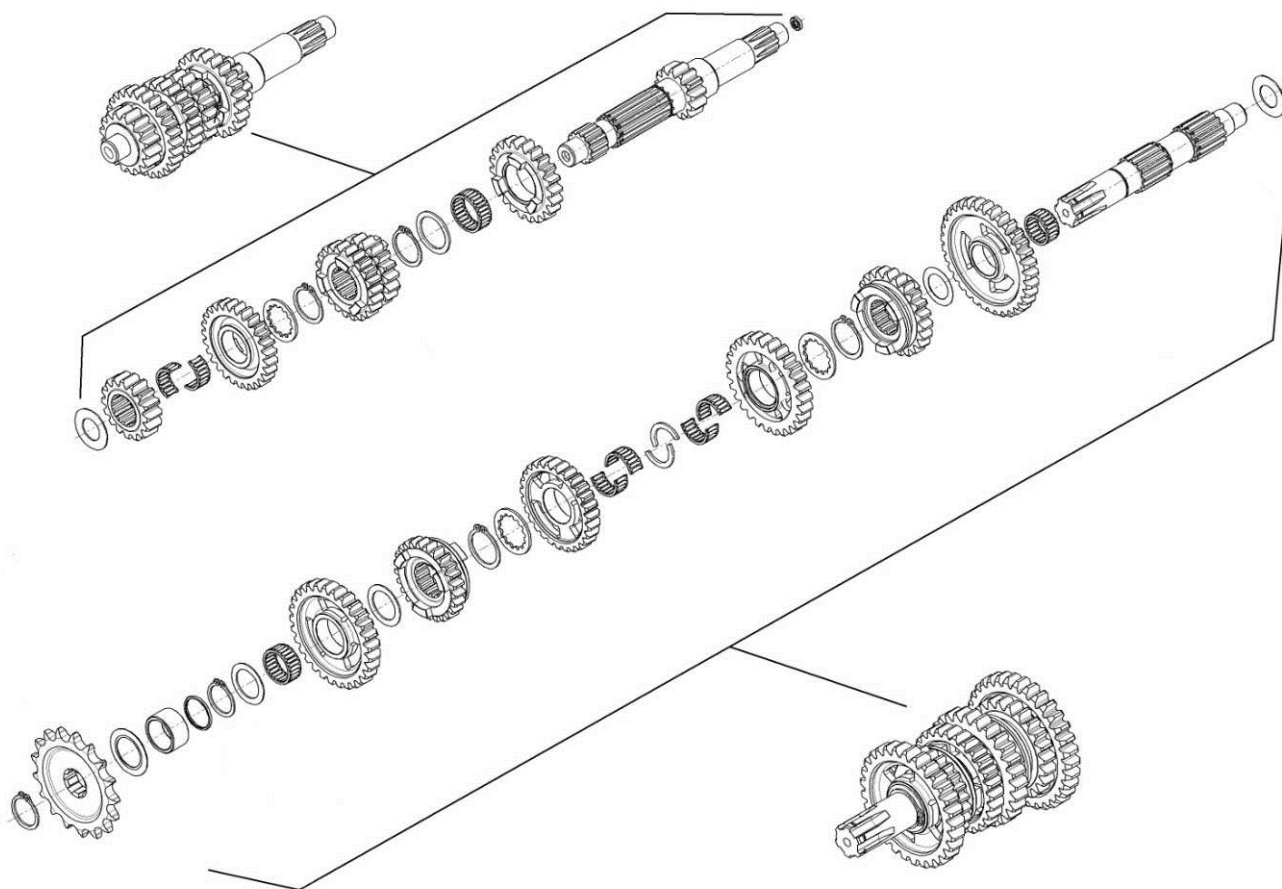


## GEARBOX - BOÎTE DE VITESSES

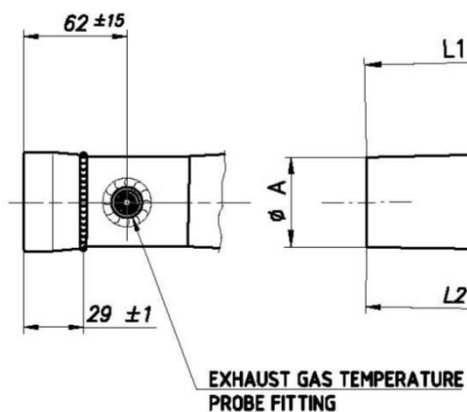
Primary coupling - Couple primaire **19 / 75**

Gearbox ratios		Rapports de boîte de vitesses	
Gear - Vitesse	Primary shaft Arbre primaire	Secondary shaft Arbre secondaire	Reading of values obtained after three engine revs Relevé des valeurs obtenues après trois tours moteur
1 <sup>st</sup> / 1 <sup>ère</sup>	<b>13</b>	<b>33</b>	<b>107.78°</b>
2 <sup>nd</sup> / 2 <sup>e</sup>	<b>16</b>	<b>29</b>	<b>150.95°</b>
3 <sup>rd</sup> / 3 <sup>e</sup>	<b>18</b>	<b>27</b>	<b>182.40°</b>
4 <sup>th</sup> / 4 <sup>e</sup>	<b>22</b>	<b>27</b>	<b>222.93°</b>
5 <sup>th</sup> / 5 <sup>e</sup>	<b>22</b>	<b>23</b>	<b>261.70°</b>
6 <sup>th</sup> / 6 <sup>e</sup>	<b>27</b>	<b>25</b>	<b>295.49°</b>

EXPLODED DRAWING OF THE GEARS, MAINSHAFT AND SECONDARY SHAFT  
DESSIN EXPLODÉ DES ENGRANAGES, ARBRE PRIMAIRE ET ARBRE SECONDAIRE



EXHAUST VIEW, PHOTO AND DIMENSIONS  
VUE, PHOTO ET DIMENSIONS DE L'ÉCHAPPEMENT

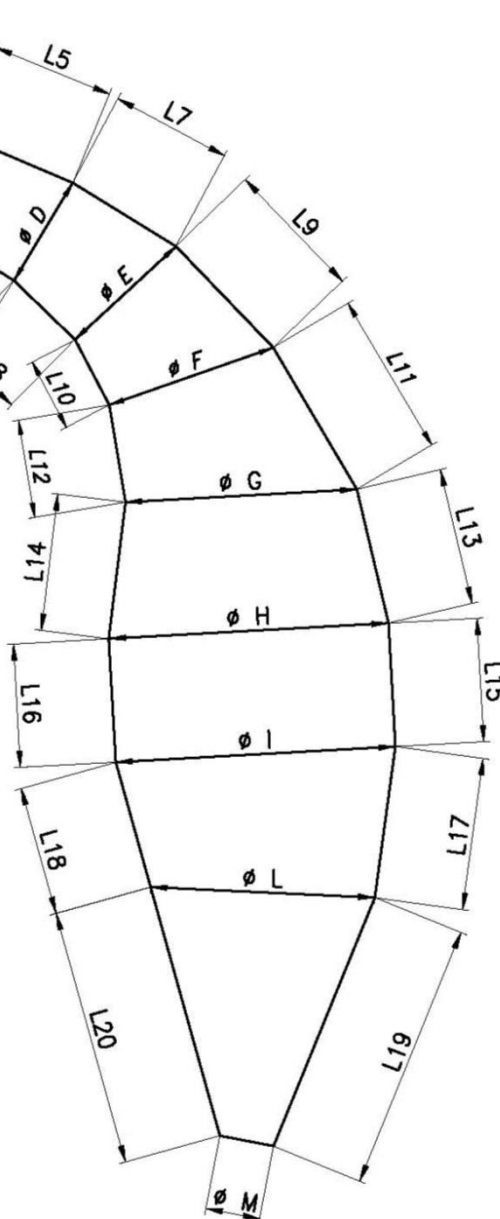


Part Partie	D. MIN.	D. MAX	L. MIN.	L. MAX.
1	ØA 42.6	ØB 48	L2 95	L1 103
2	ØB 48	ØC 53	L4 44	L3 56
3	ØC 53	ØD 65.3	L6 45	L5 60
4	ØD 65.3	ØE 79	L8 41.5	L7 60
5	ØE 79	ØF 95	L10 42	L9 60
6	ØF 95	ØG 112	L12 39	L11 53
7	ØG 112	ØH 137	L14 51	L13 74
8	ØH 137	ØI 137	L16 65	L15 65
9	ØL 88.6	ØI 137	L18 84	L17 101
10	ØM 26	ØL 88.6	L20 115	L19 115

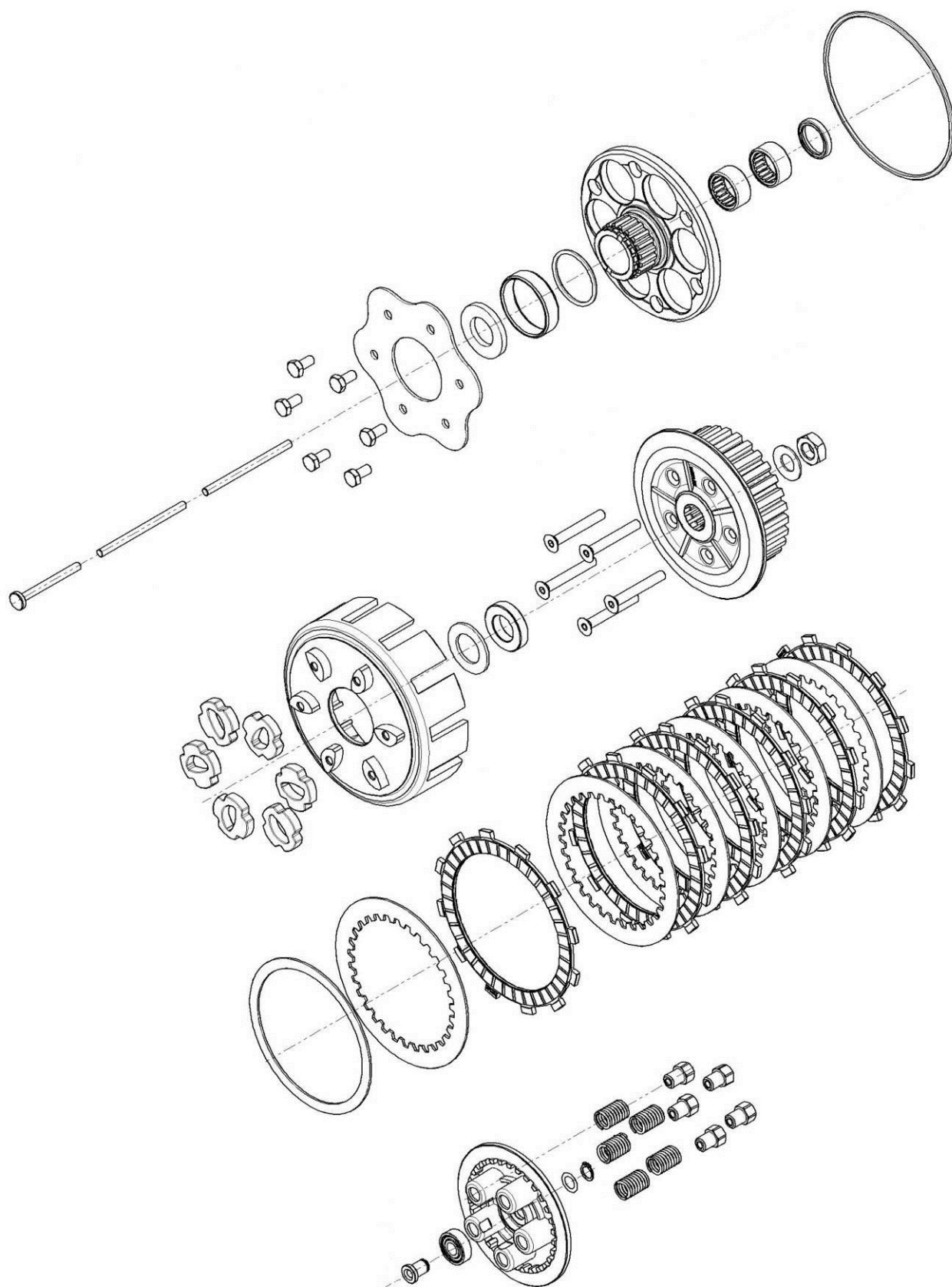
Min. weight 1.09 Kg  
Poids min. 1.09 Kg

Thickness 0.8 mm ±0.08  
Épaisseur 0.8 mm ±0.08

Volume= 4120 cm<sup>3</sup> ±5%

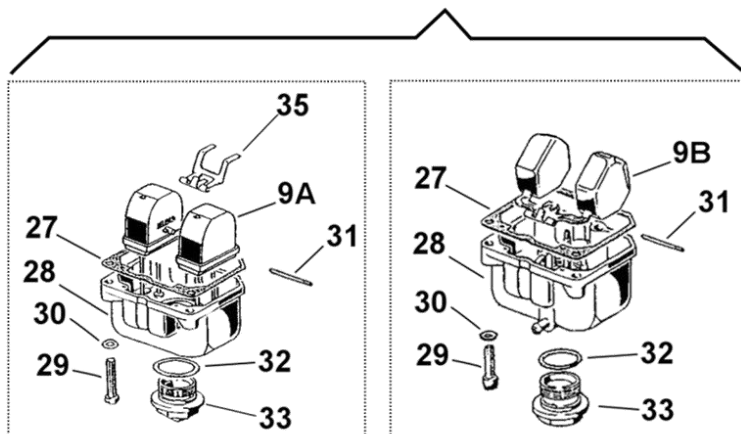
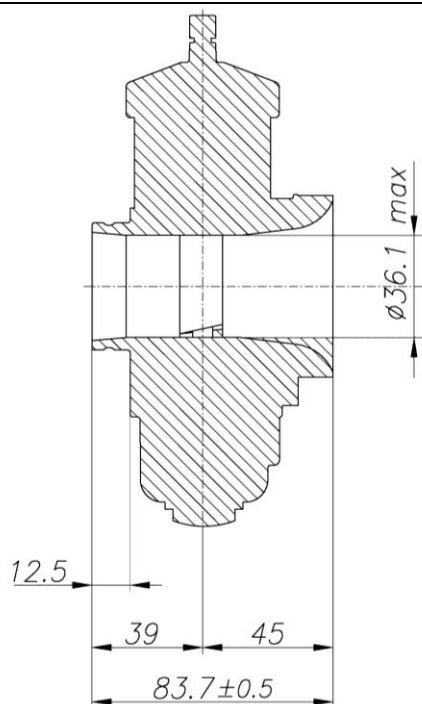
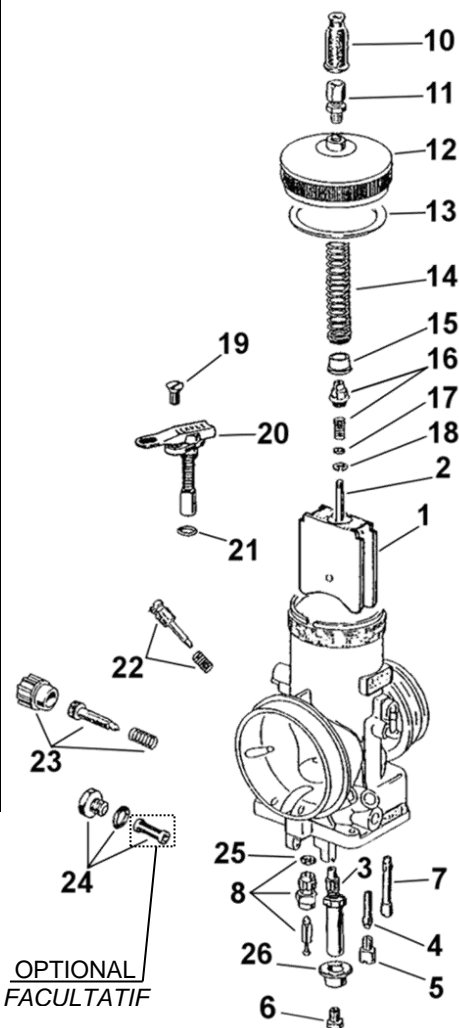


EXPLODED DRAWING OF THE CLUTCH ASSEMBLY  
*DESSIN EXPLOSE DE L'EMBRAYAGE COMPLETE*

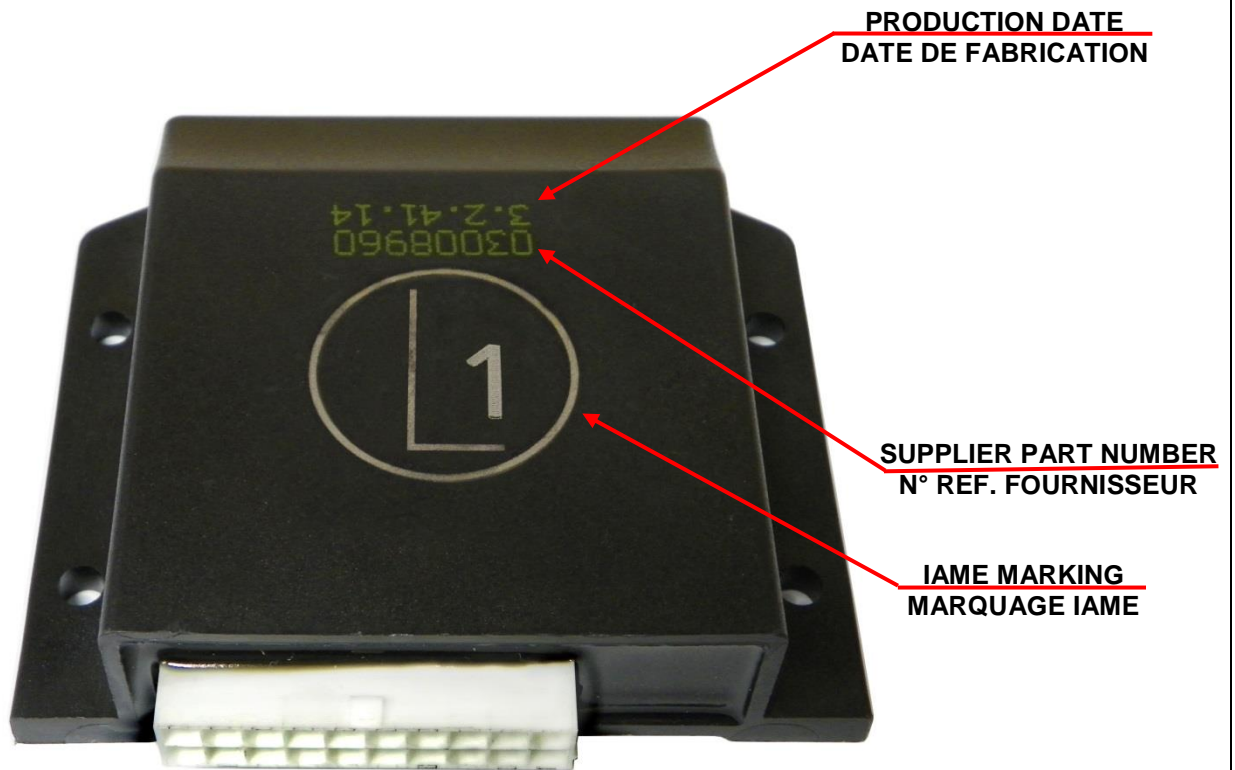


# EXPLODED DRAWING AND VENTURI CARB. "DELLORTO VHSB 36-RD" DIMENSIONS DESSIN EXPLOSÉ ET DIMENSIONS DU VENTURI DU CAR. "DELLORTO VHSB 36-RD"

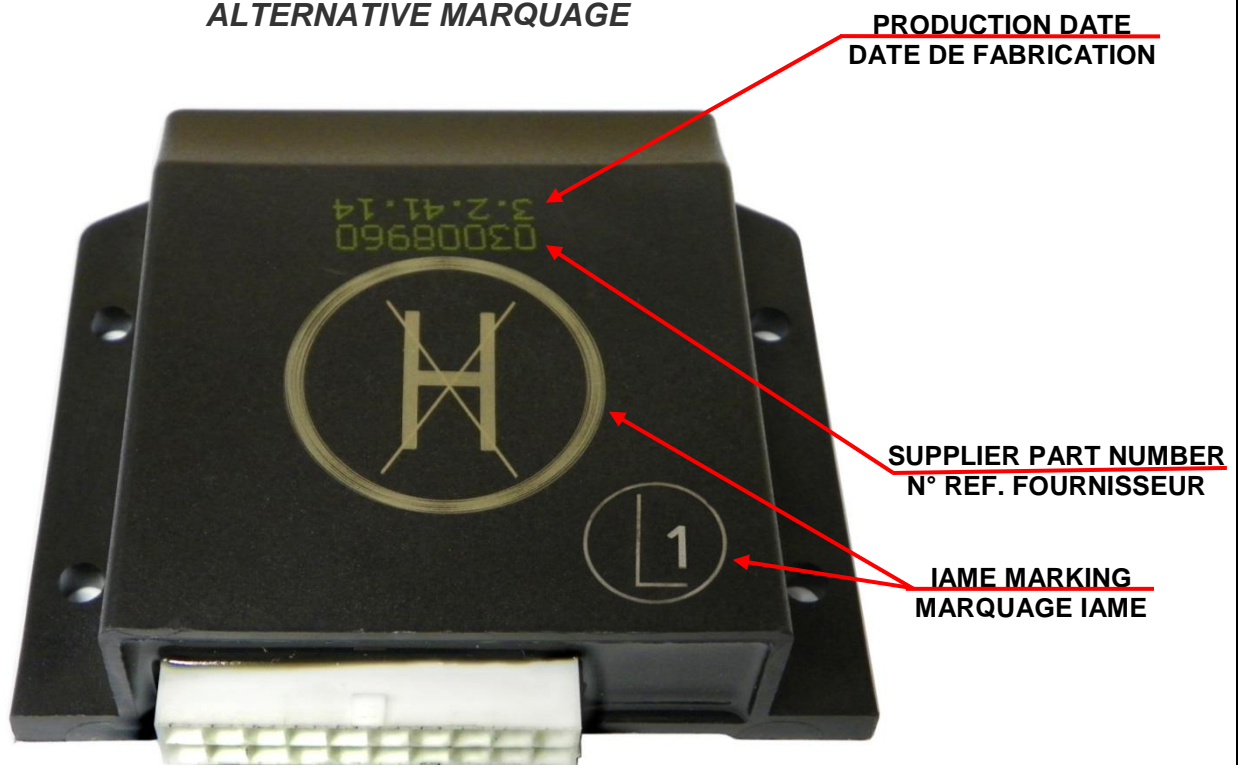
1. Throttle Valve - SOUPAPE GAZ
2. Conical Needle - AIGUILLE CONIQUE
3. Sprayer - PULVERISATEUR
4. Minimum Emulsifier - EMULSIONNEUR
5. L. Jet - GICLEUR MIN.
6. H Jet - GICLEUR MAX.
7. Starter Jet - GICLEUR DEMARREUR
8. Needle Valve - POINTEAU
- 9A. Single Floating - FLOTTEUR INDEPENDANT
- 9B. Coupled Floating - PAIRE DE FLOTTEUR
10. Cap - BOUCHON
11. Screw Adjuster - VIS REGLAGE
12. Cover Mixing Chamber - COUVERCLE CHAMBRE DE MELANGE
13. Cover Gasket - JOINT COUVERCLE
14. Throttle Return Spring - RESSORT RETOUR SOUPAPE
15. Bottom Spring Guide - CULOT
16. Nipple Throttle Valve + Spring - RACCORD ROBINET GAZ + RESSORT
17. Washer - RONDELLE
18. Clip Needle - FERMOIR POINTEAU
19. Start Fixing Screw - VIS FIXATION DISPOSITIF DEMARRAGE
20. Starter Device - DISPOSITIF DEMARRAGE
21. Starter Device Seal - JOINT DISP. DEMARRAGE
22. Idle Mixture Screw - VIS MELANGE MINIMUM
23. Kit Throttle Adjusting Screw - KIT VIS REGLAGE SOUPAPE
24. Kit Fuel Filter - KIT FILTRE CARBURANT
25. Needle Valve Seal - JOINT POINTEAU
26. Bottom - CULOT
27. Gasket - JOINT
28. Float Chamber - CUVETTE
29. Fixing Screw Float Chamber - VIS FIXATION CUVETTE
30. Spring Washer - RONDELLE RESSORT
31. Pin Float - AXE DE FLOTTEUR
32. Tank Cap Seal - JOINT BOUCHON CUVETTE
33. Float Chamber Plug - BOUCHON CUVETTE
35. Rocker Float - BALANCIER FLOTTEUR



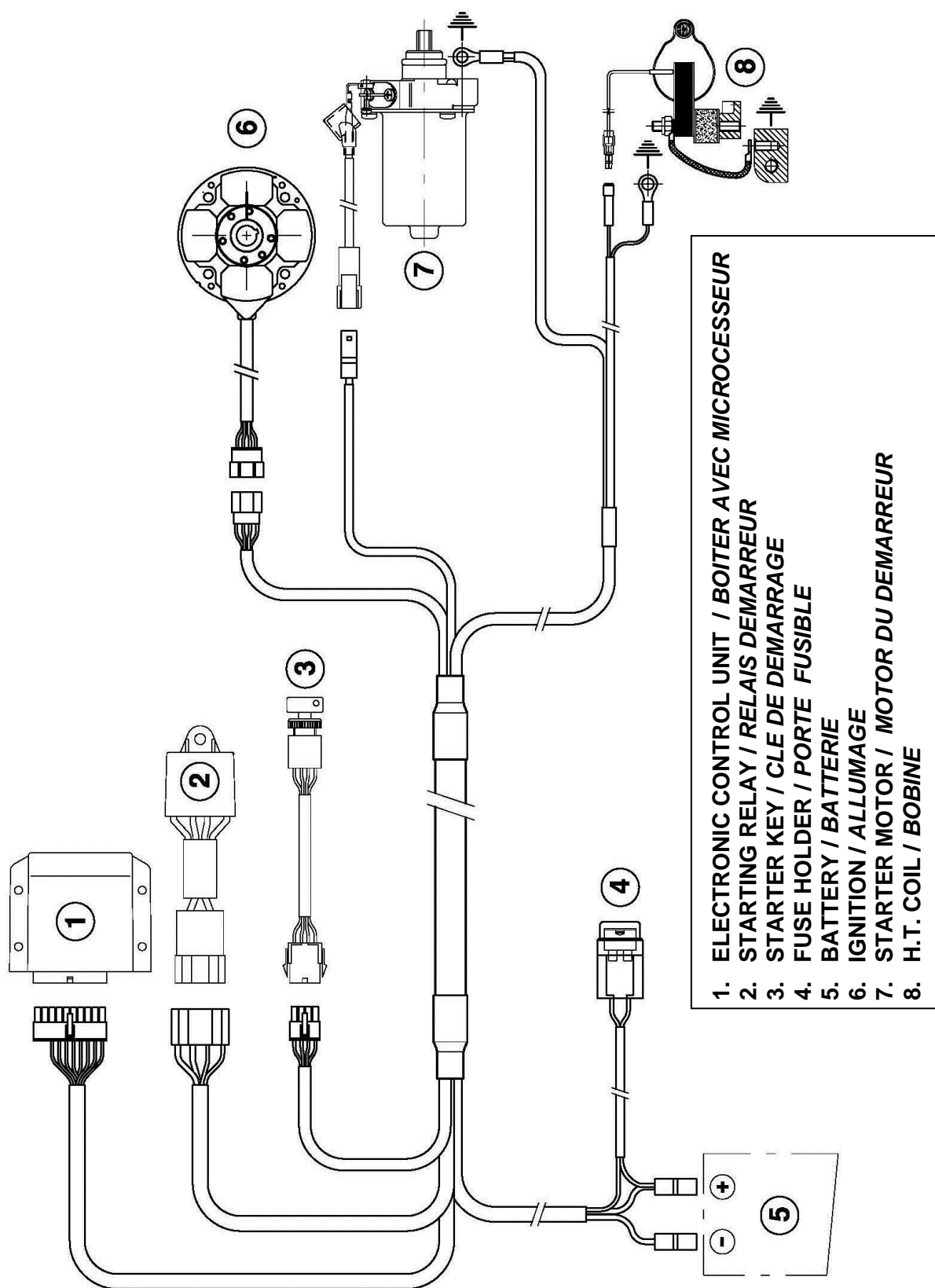
SELETTRA - ELECTRONIC BOX MARKING  
SELETTRA - MARQUAGE DU BOITIER ELECTRONIQUE



ALTERNATIVE MARKING  
ALTERNATIVE MARQUAGE



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



SELECTOR COVER IDENTIFICATION  
 IDENTIFICATION DU COUVERCLE SELECTEUR

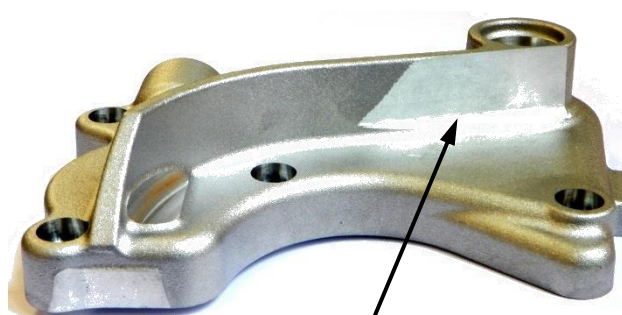
Old version  
 Vieille version



New version  
 Nouvelle version

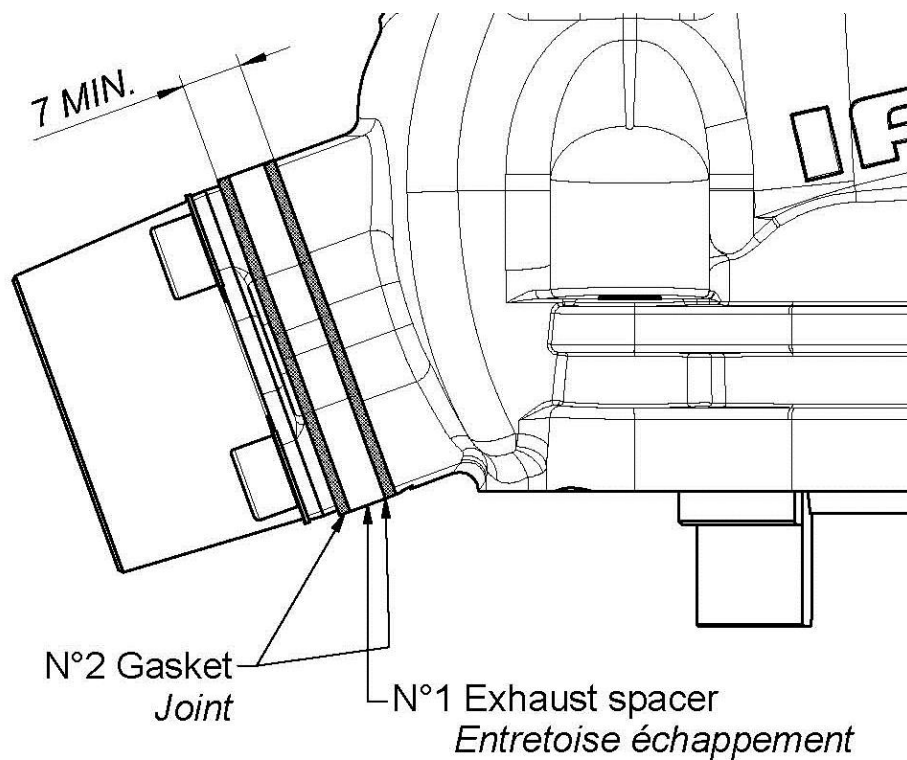


ADDITIONAL CNC Machined  
 SUPPLÉMENTAIRES Usiné CNC

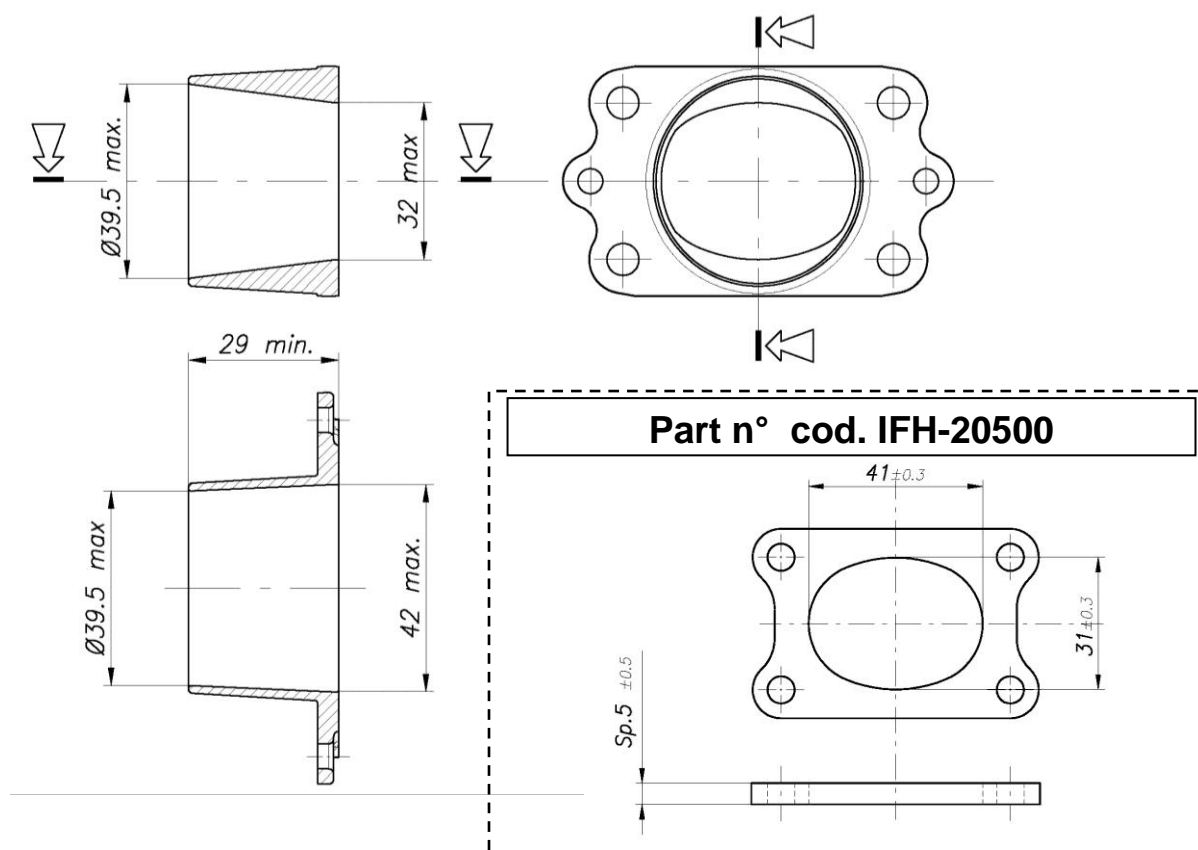


ADDITIONAL CNC Machined  
 SUPPLÉMENTAIRES Usiné CNC

MINIMUM DISTANCE BETWEEN EXHAUST MANIFOLD AND CYLINDER  
 DISTANCE MINIMALE ENTRE RACCORD D'ÉCHAPPEMENT ET CYLINDRE

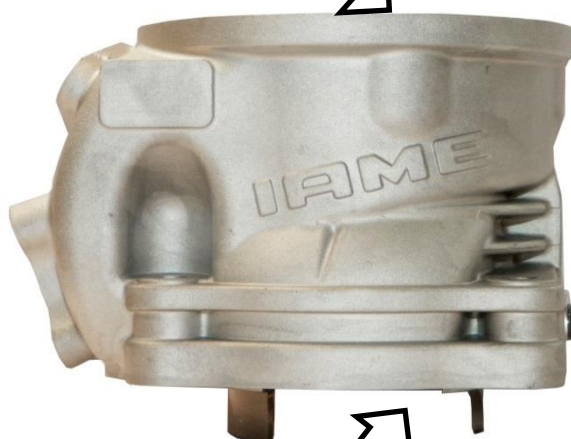


EXHAUST MANIFOLD AND SPACER VIEW AND DIMENSIONS  
 VUE ET DIMENSIONS DU RACCORD D'ÉCHAPPEMENT ET ESPACEUR



NEW 5th PORT – ADMISSION IDENTIFICATION  
 IDENTIFICATION DU NOUVEAU 5<sup>e</sup> LUMIERE

VIEW FROM “A”  
VEU DEPUIS “A”



VIEW FROM “B”  
VEU DEPUIS “B”

**OLD VERSION**  
**VIEILLE VERSION**

**NEW VERSION**  
**NOUVELLE VERSION**

VIEW FROM “A” - VEU DEPUIS “A”

VIEW FROM “A” - VEU DEPUIS “A”



VIEW FROM “B” - VEU DEPUIS “B”

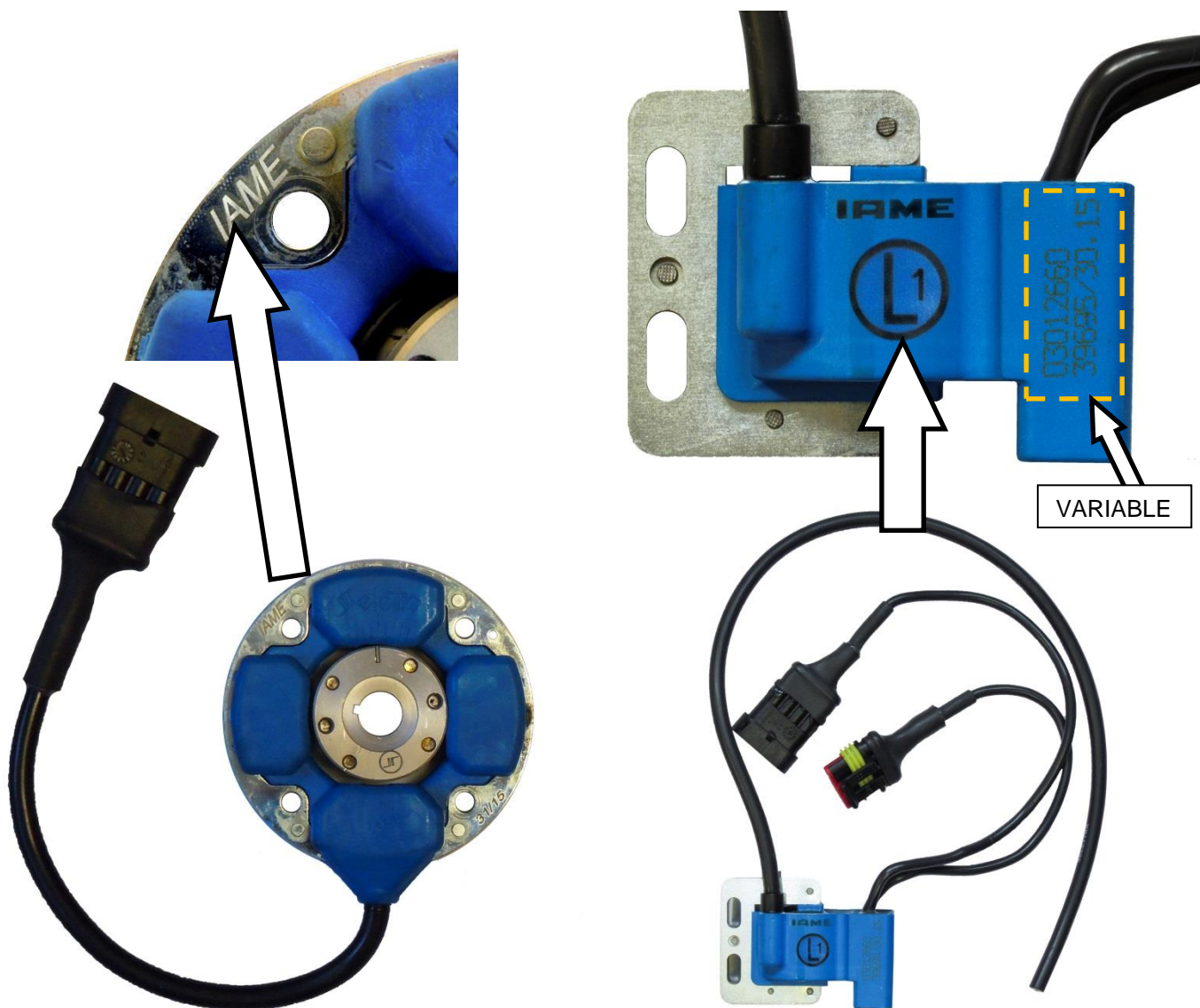
VIEW FROM “B” - VEU DEPUIS “B”



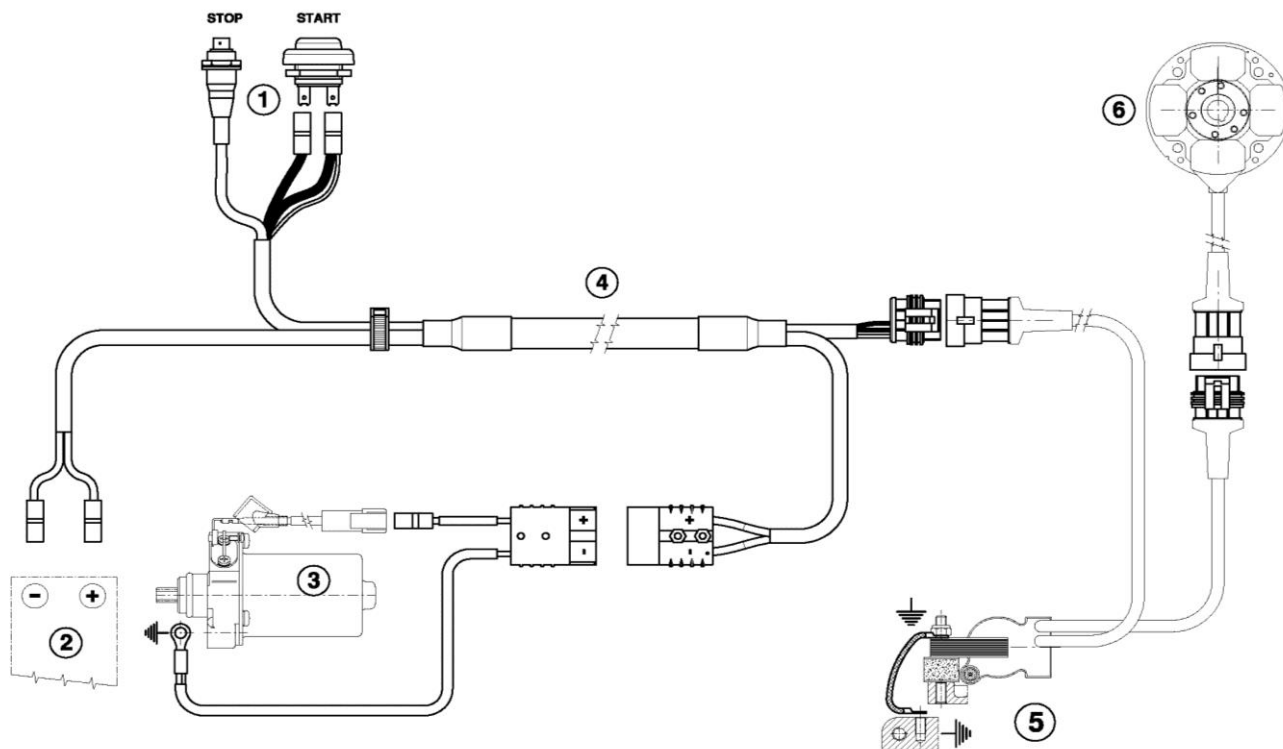
PHOTO COMPLETE ALTERNATIVE WIRING LOOM  
 PHOTO DU CABLAGE ELECTRONIQUE COMPLET



PHOTO OF SELETTRA ALTERNATIVE DIGITAL "S" IGNITION, WITH IAME MARKING  
 PHOTO DU SELETTRA DIGITAL "S" ALLUMAGE, AVEC MARQUAGE IAME



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

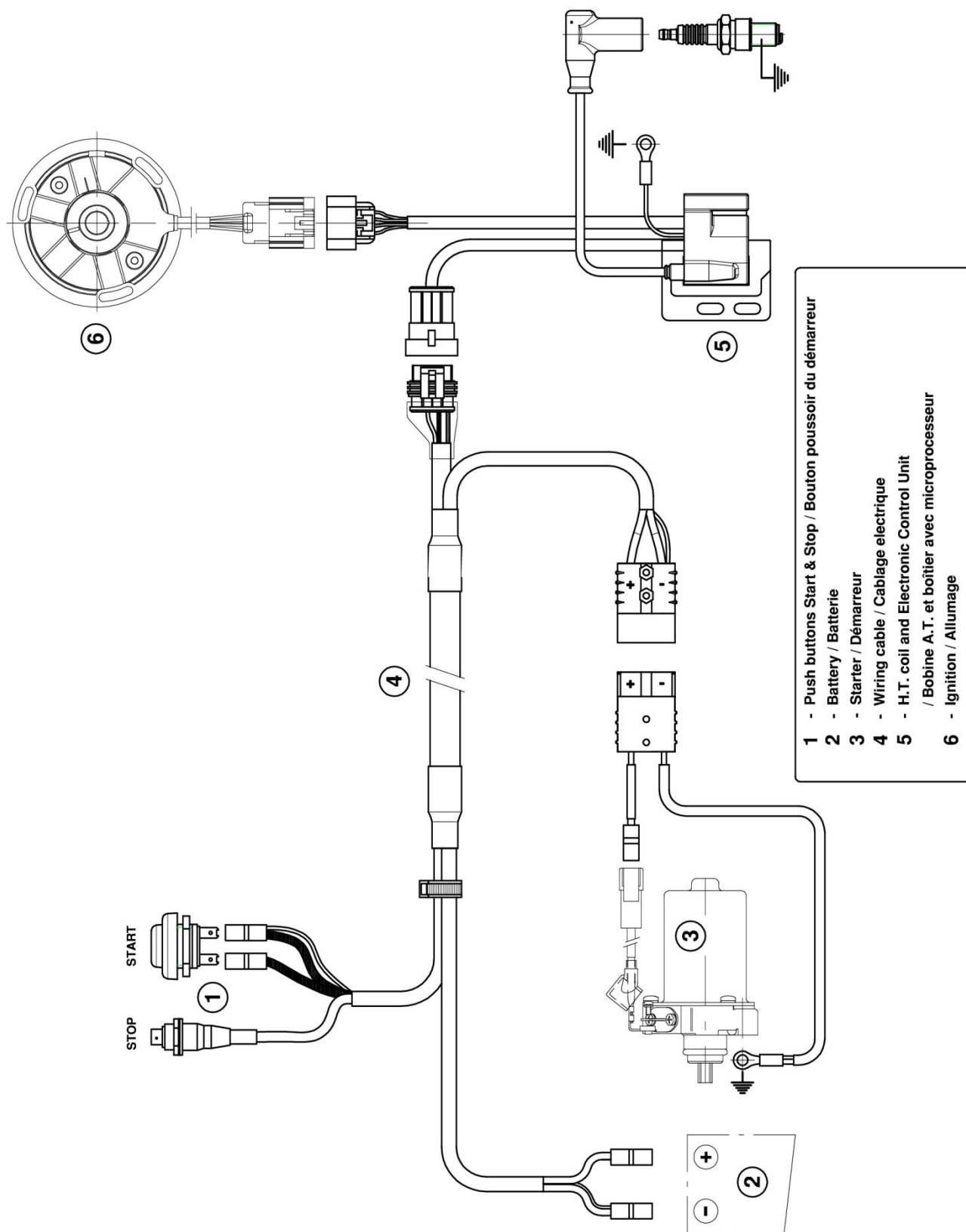


- 1 - Push buttons Start & Stop / Bouton poussoir du démarreur**
- 2 - Battery / Batterie**
- 3 - Starter / Démarreur**
- 4 - Wiring cable / Cablage électrique**
- 5 - H.T. coil and Electronic Control Unit  
/ Bobine A.T. et boîtier avec microprocesseur**
- 6 - Ignition / Allumage**

PHOTO OF ALTERNATIVE DIGITAL IGNITION PVL 690, WITH IAME MARKING  
PHOTO DU ALTERNATIVE ALLUMAGE PVL 690 DIGITALE AVEC MARQUAGE "IAME"



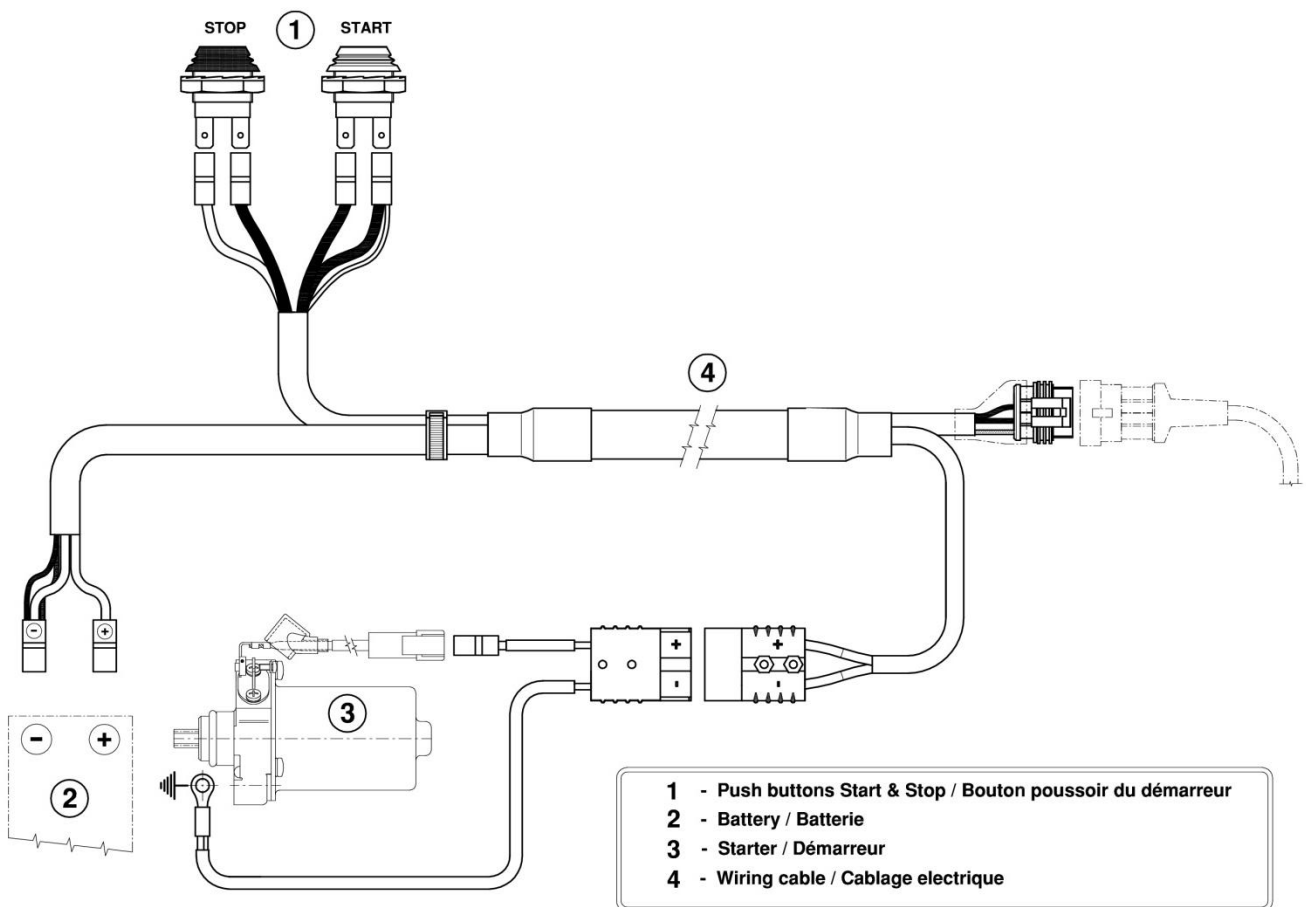
ALTERNATIVE WIRING DIAGRAM – PVL 690 DIGITAL IGNITION  
 SCHEMA CIRCUIT ELECTRIQUE ALTERNATIVE - ALLUMAGE PVL 690 DIGITAL



ALTERNATIVE WIRING LOOM  
PHOTO DU CABLAGE ELECTRIQUE ALTERNATIVE

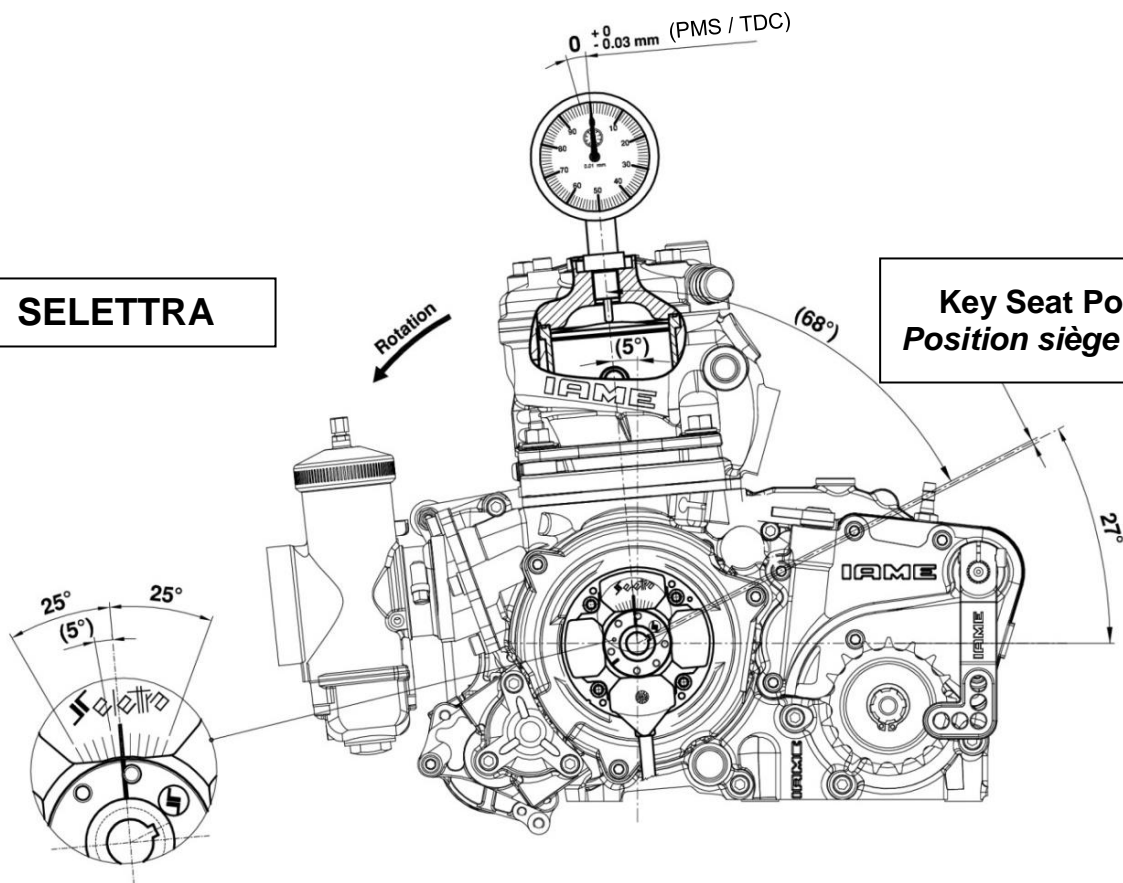


ALTERNATIVE WIRING LOOM DIAGRAM  
SCHEMA DU CABLAGE ALTERNATIVE

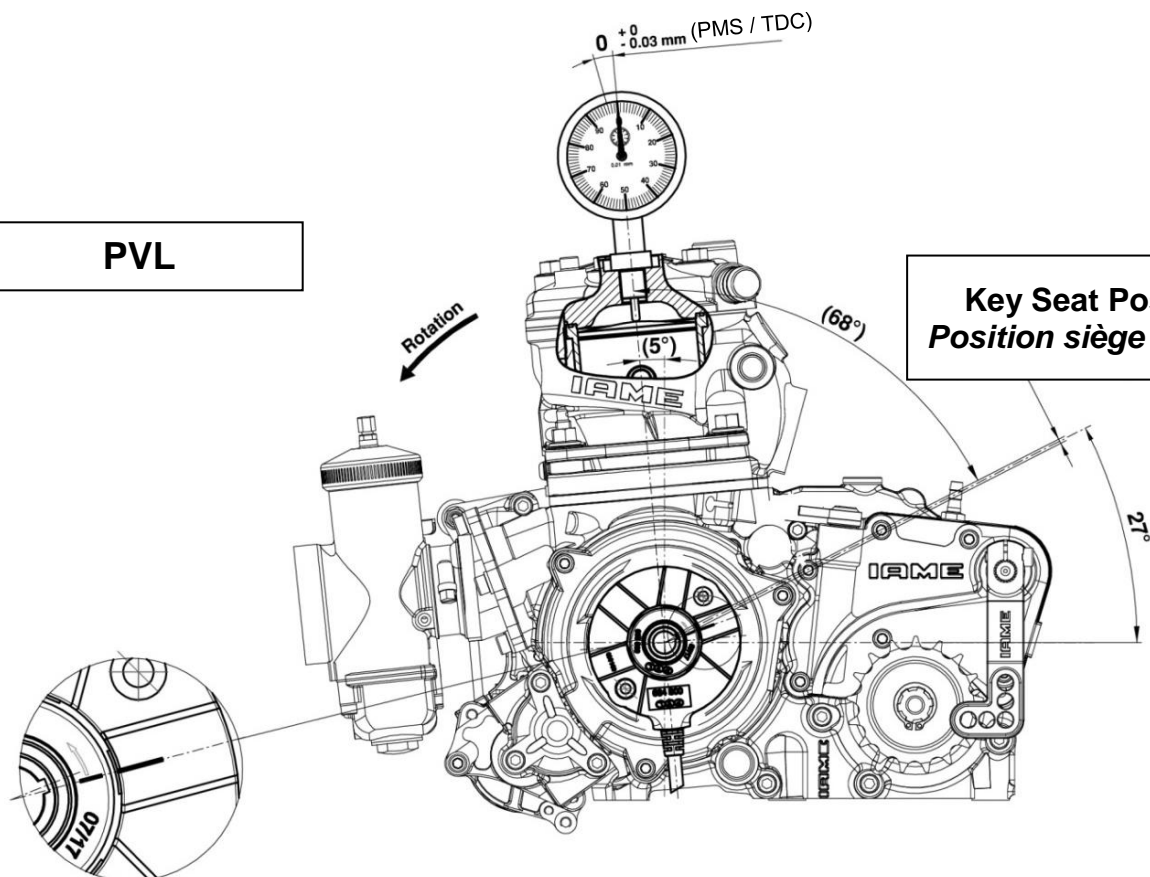


SCHEME FOR ADVANCE CONTROL  
SCHEMA DE CONTROLE POUR L'AVANCE

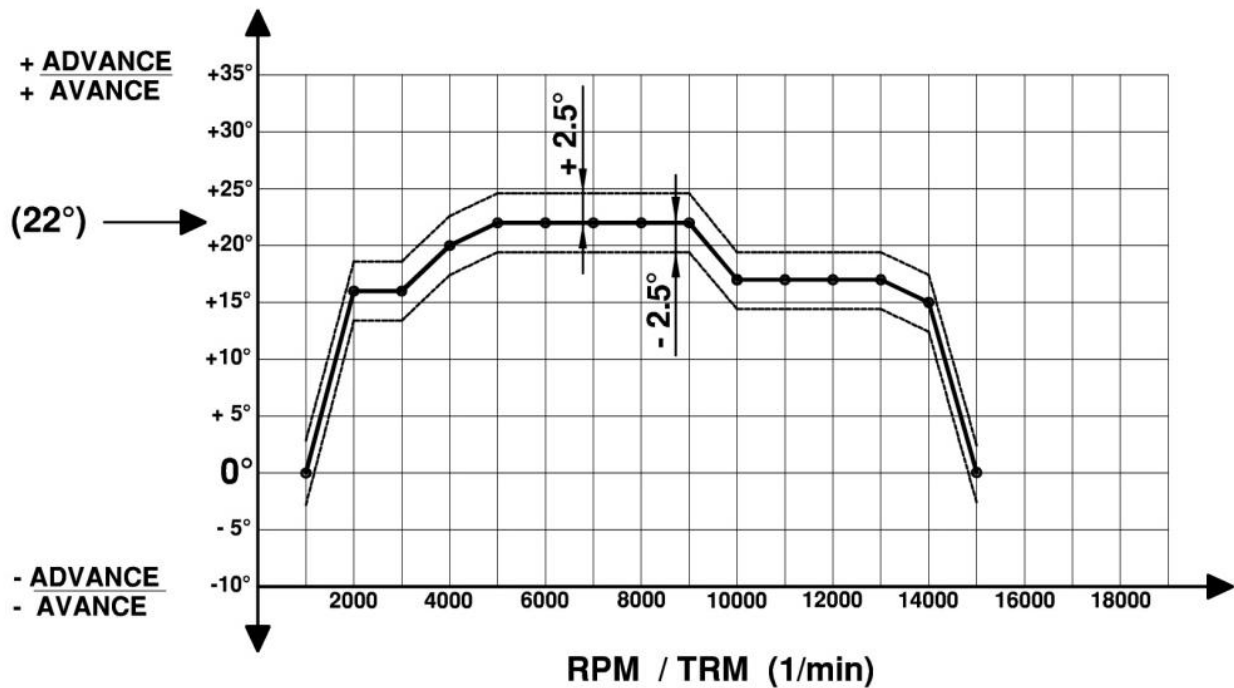
**SELETTA**



**PVL**

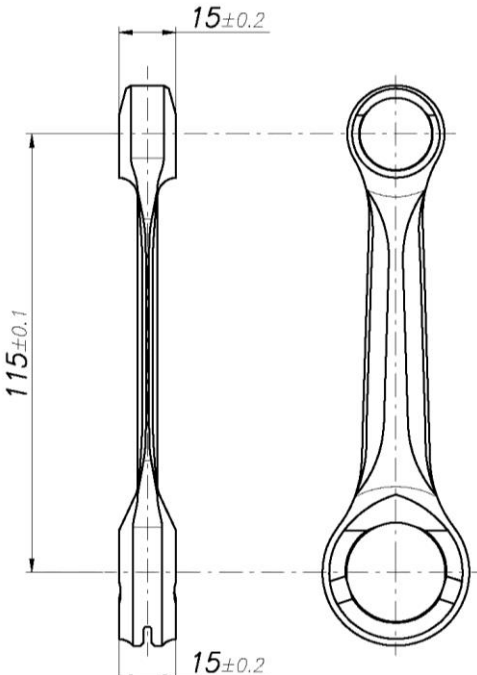
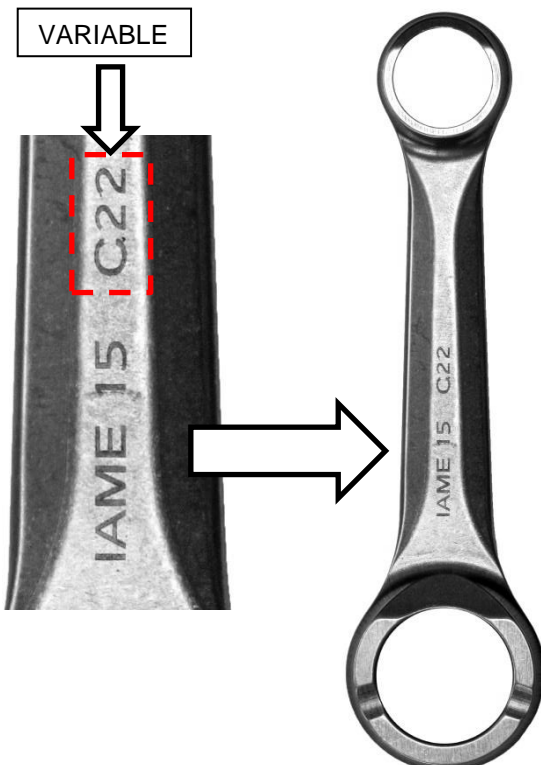




# ADVANCE CURVE GRAPHS GRAPHIQUES DE LA COURBE D'AVANCE

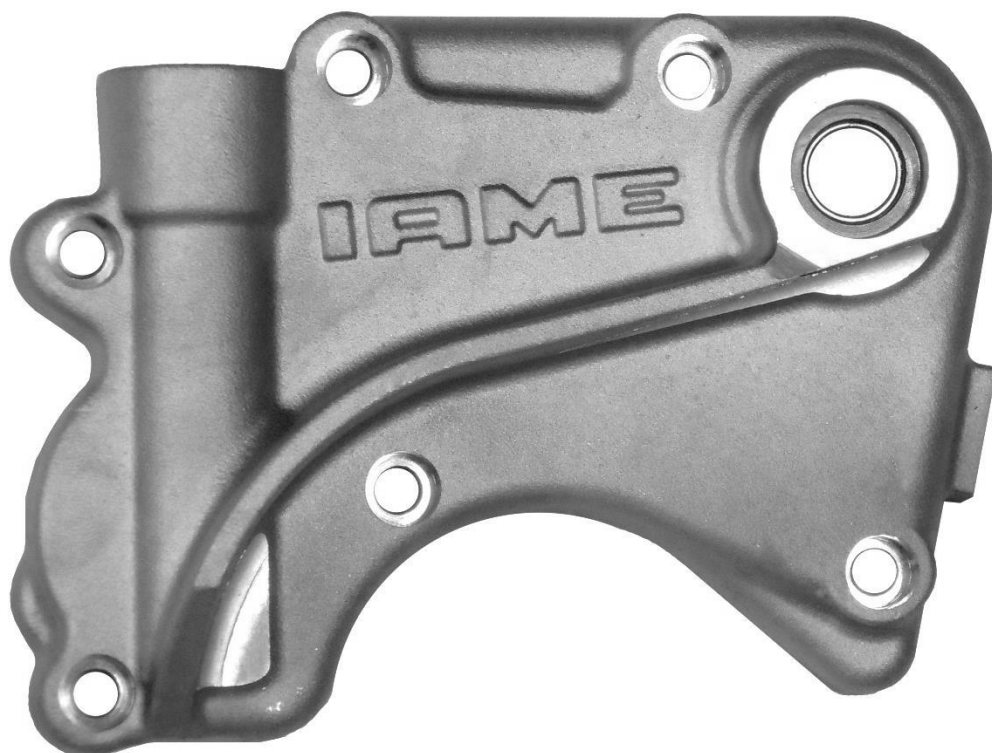


"L1" MAPPING / MAPPAGE

Tr/ min	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000	13000	14000	15000
° adv	0°	16°	16°	20°	22°	22°	22°	22°	22°	17°	17°	17°	17°	15°	0°

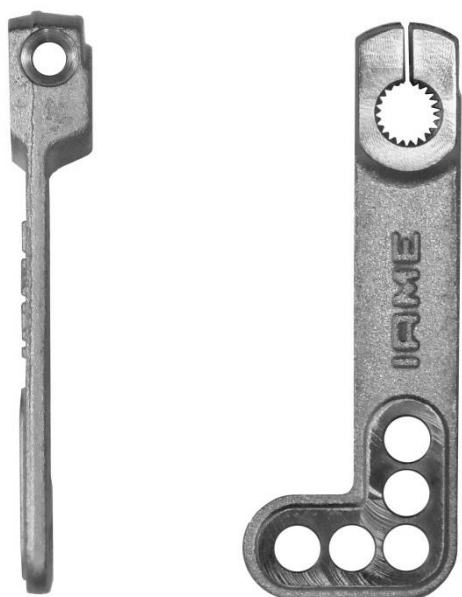
ALTERNATIVE CONROD IDENTIFICATION IDENTIFICATION DU BIELLE ALTERNATIVE	
DISTANCE BETWEEN CONROD CENTERS ENTRE AXE DE LA BIELLE	PHOTO IDENTIFICATION IDENTIFICATION PHOTO
 <p>Min. weight 119 g Poids min. 119 g</p>	
Current PRESELECTOR CONTROL SHAFT Actuelle ARBRE COMMANDE PRESELECTEUR	New PRESELECTOR CONTROL SHAFT Nouvelle ARBRE COMMANDE PRESELECTEUR
	

ALTERNATIVE SELECTOR COVER IDENTIFICATION  
 IDENTIFICATION DU COUVERCLE SELECTEUR ALTERNATIVE



Current SHIFT CONTROL LEVER  
 Actuelle LEVIER CHANGEM. VITESSE

New SHIFT CONTROL LEVER  
 Nouvelle LEVIER CHANGEM. VITESSE



ALTERNATIVE CYLINDER CROSS SECTION VIEW  
*VUE EN SECTION DU CYLINDRE ALTERNATIVE*

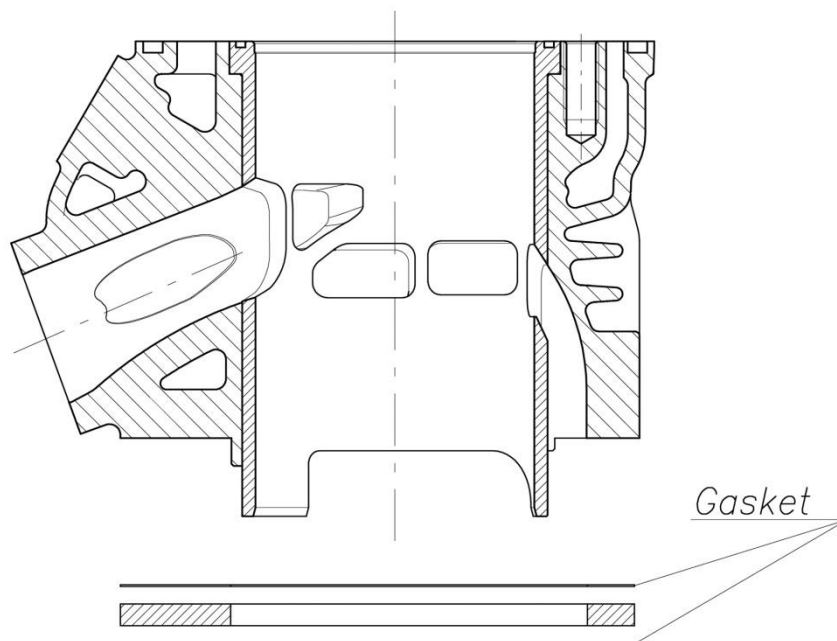


PHOTO OF THE ALTERNATIVE CYLINDER FROM ABOVE  
*VUE DU HAUT DU CYLINDRE ANTERTNATIVE*

