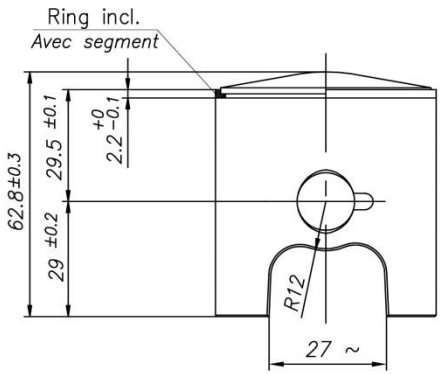
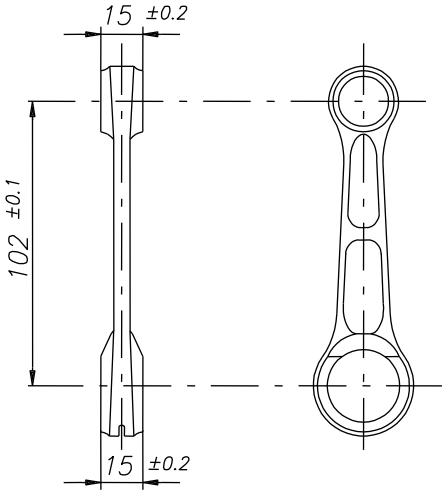
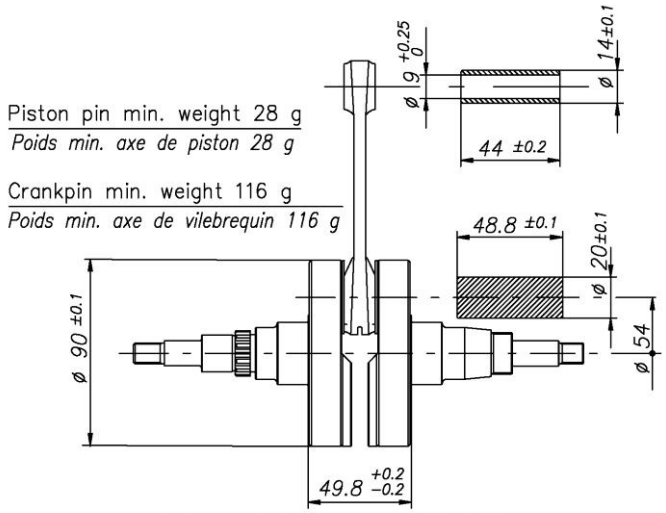
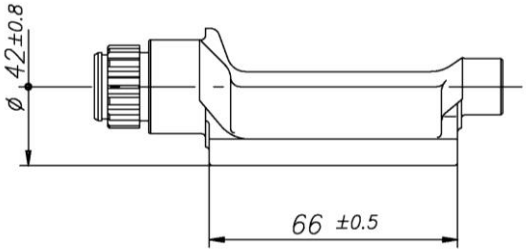
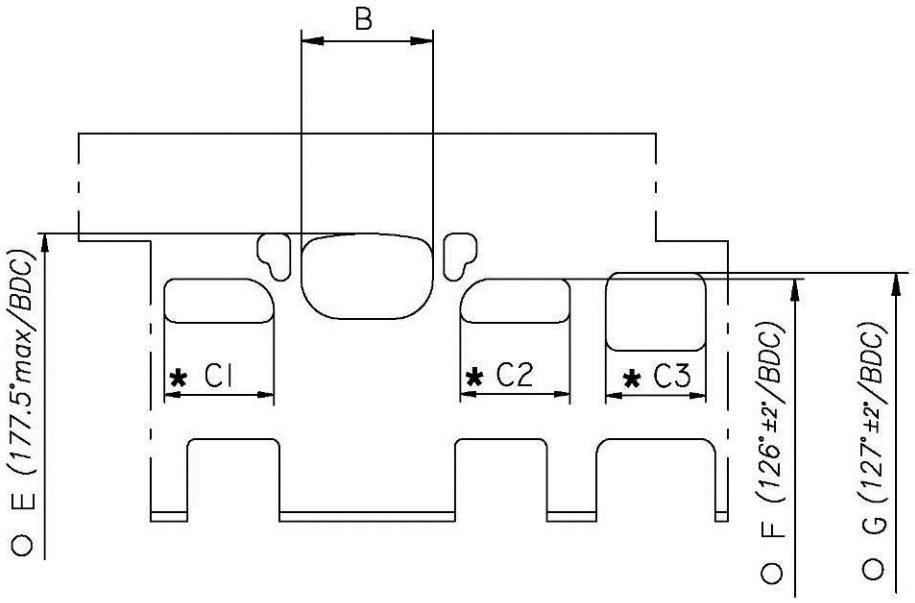
# X30 BY IAME 125cc RL-C TaG


| FEATURES - *CARACTERISTIQUES* | |
|---|---|
| Cylinder volume<br>*Volume du cylindre* | 123.67 cm³ |
| Bore<br>*Alésage* | 54 mm |
| Max. theoretical bore<br>*Alésage théorique max.* | 54.28 mm |
| Stroke<br>*Course* | 54 mm |
| Cooling system<br>*Système de refroidissement* | Water<br>*À Eau* |
| Inlet system<br>*Système d' admission* | Reed valve<br>*À clapets* |
| Cylinder / crankcase transfers n°<br>*N° de canaux cylindre / carter* | 3 / 3 |

| | | | |
|---|---|---|---|
| Carburetor Tillotson<br>*Carburateur* Tillotson | HW-27A<br>(Ø27 Venturi) | Inlet / exhaust ports number<br>*N° lumières admiss. / échapp.* | 3 / 3 |
| Number of piston rings<br>*Nombre de segments* | 1 | Combustion chamber shape<br>*Forme chambre de combustion* | Spherical<br>*Sphèrique* |
| Big end conr. ball-bearing diam.<br>*Diamètre palier tête de bielle* | 20x26x15 | Selettra *or PVL ignition*<br>*Allumage Selettra ou PVL* | Digital |
| Crankshaft ball-bearing diam.<br>*Diamètre palier du vilebrequin* | 30x62x16 | Distance between conrod centers<br>*Longueur (entre axe) de la bielle* | 102 mm |
| Small end conr. ball-bearing diam.<br>*Diamètre palier pied de bielle* | 14x18x17.5 | RPM limiter<br>*Limiteur de régime* | Yes<br>*Oui* |
| Balancing shaft<br>*Arbre d' equilibrage de vilebr.* | *Yes*<br>*Oui* | Electric starter<br>*Démarreur électrique* | *Yes*<br>*Oui* |

| DESCRIPTION OF THE MATERIAL<br>*DESCRIPTION DES MATERIAUX* | | PISTON |
|---|---|---|
| Conrod material<br>*Matériel de la bielle* | Steel<br>*Acier* |  <br>Piston min. weight (ring incl.) 128 g<br>*Poids min. piston (avec segment) 128g* |
| Crankshaft material<br>*Matériel du vilebrequin* | Steel<br>*Acier* | |
| Balancing shaft material<br>*Matériel de l' arbre d' équilibrage* | Steel<br>*Acier* | |
| Gears material<br>*Matériel des engrenages* | Steel<br>*Acier* | |
| Starter ring material<br>*Matériel de la couronne démarr.* | Steel<br>*Acier* | |
| Head material<br>*Matériel de la culasse* | Aluminium | DISTANCE BETWEEN CONROD CENTERS<br>*ENTRE AXE DE LA BIELLE* |
| Cylinder material<br>*Matériel du cylindre* | Aluminium |  <br>Min. weight 110 g<br>*Poids min. 110 g* |
| Liner material<br>*Matériel de la chemise* | Iron<br>*Fonte* | |
| Crankcase material<br>*Matériel du carter* | Aluminium | |
| Piston material<br>*Matériel du piston* | Aluminium | |
| Piston rings material<br>*Matériel des segments* | Iron<br>*Fonte* | |
| Exhaust muffler material<br>*Matériel du pot d' échappement* | Sheet-steel<br>*Tôle acier* | |
| Ball-bearings<br>*Roulements* | 6206 type | |
| CRANKSHAFT - *VILEBREQUIN* | | BALANCING SHAFT<br>*ARBRE D' EQUILIBRAGE* |
|  <br>Complete crankshaft min. weight 2150 g<br>*Poids min. du vilebrequin complet 2150 g* | |  <br>Min. weight 315 g<br>*Poids Min. 315 g* |

## CYLINDER DEVELOPMENT - *DEVELOPPEMENT DU CYLINDRE*

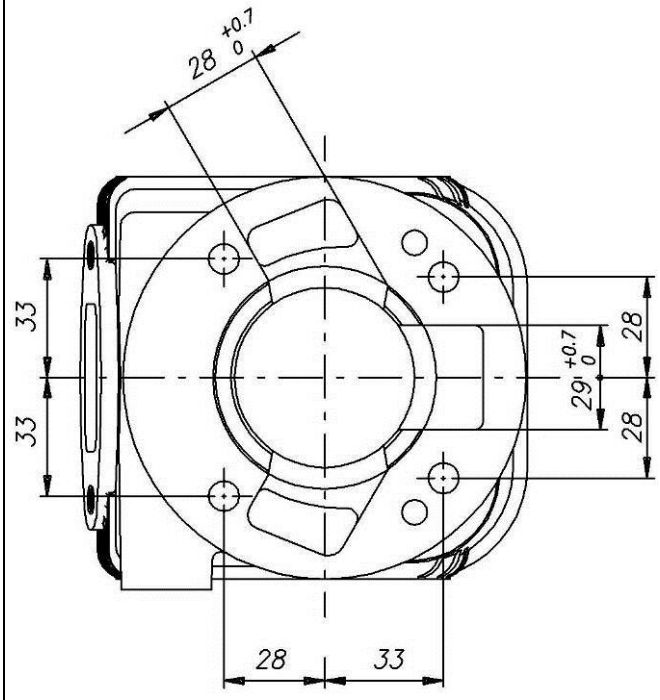



| | |
|---|---|
| B | ≤ 36.5 mm |
| C1 = C2 | ≤ 30 mm |
| C3 | ≤ 28.5 mm |
| E | 177.5° max |
| F | 126° ± 2° |
| G | 127° ± 2° |

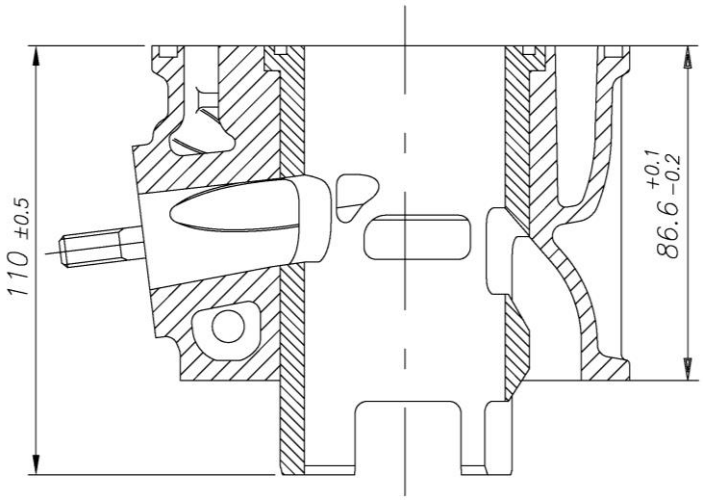
* *CHORDAL READING*
*LECTURE CORDALE*

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

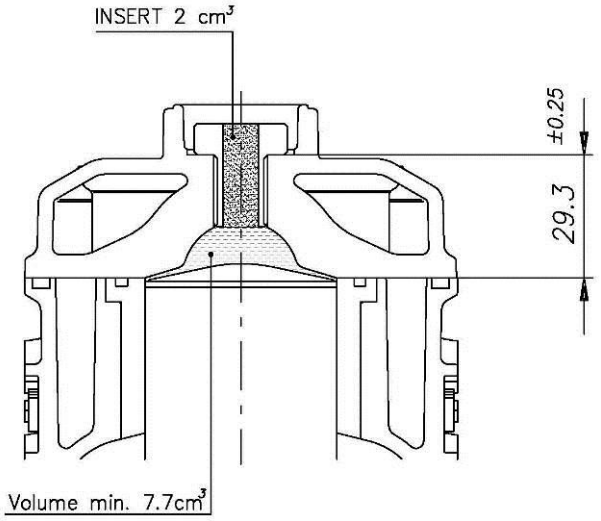
## CYLINDER BASE VIEW
## *VUE DE LA BASE DU CYLINDRE*




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



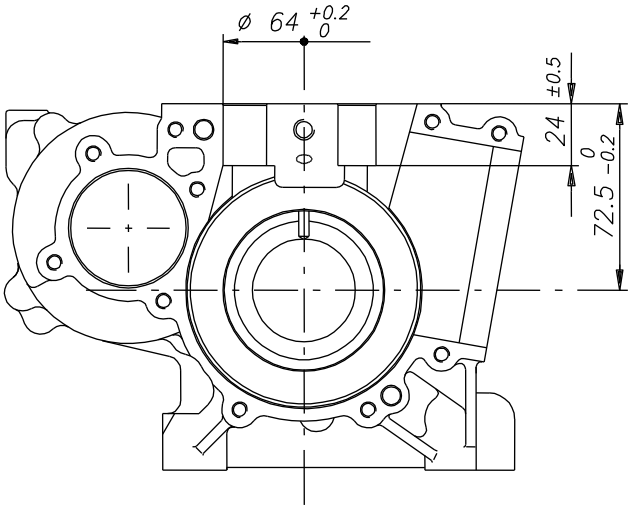
## COMBUSTION CHAMBER VIEW
*VUE DE LA CHAMBRE DE COMPRESSION*



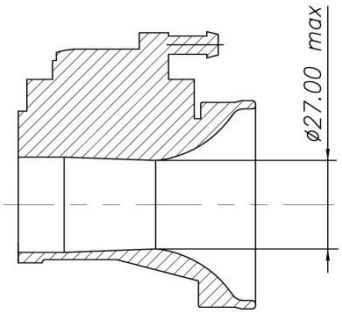

COMBUSTION CHAMBER VOLUME TOT. = 9.7 cm³ min.
*VOLUME CHAMBRE COMBUSTION TOT. = 9.7 cm³ min.*

**ATT.: SQUISH MIN. = 0.90 mm**
(measured with Ø1.5mm TIN - *mesurée avec de l'étain Ø1.5mm)*

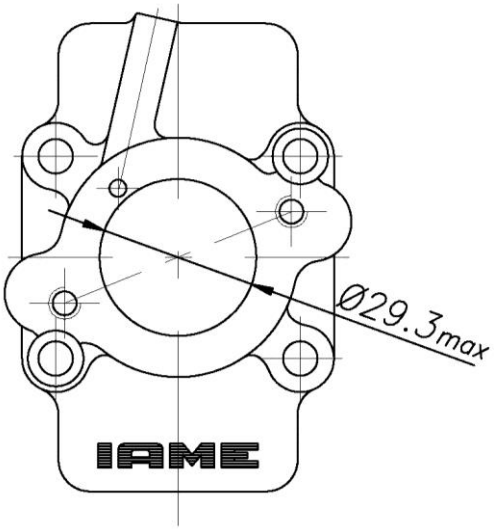
## CRANKCASE INSIDE VIEW
*VUE A' L' INTERIEUR DU CARTER*



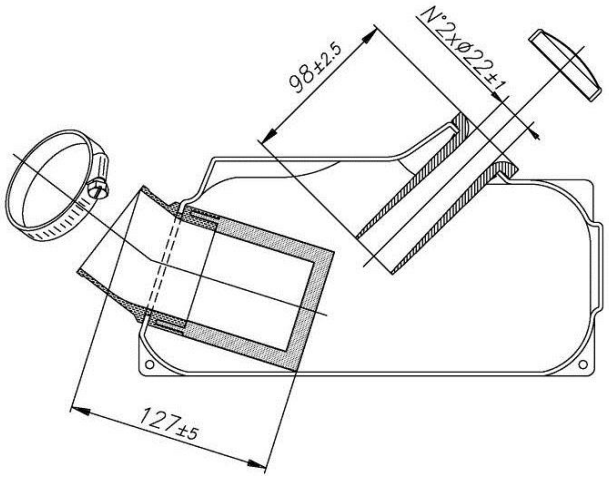

## VENTURI CARB. DIMENSIONS
*DIMENSIONS DU VENTURI DU CARBURATEUR*



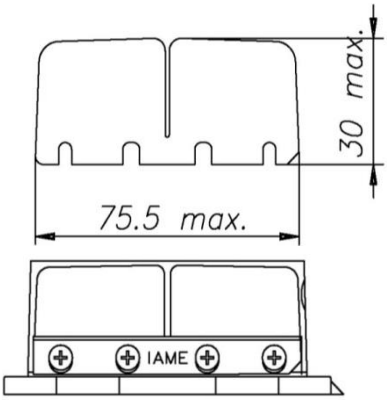

## INLET CONVERYOR DIMENSIONS
*CONVOYEUR D'ADMISSION*



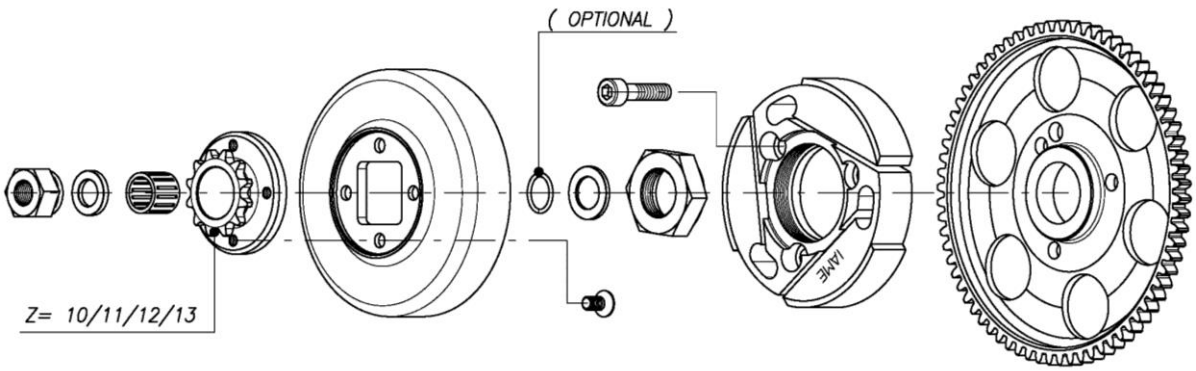

## INLET SILENCER
*SILENCIEUX D' ASPIRATION*

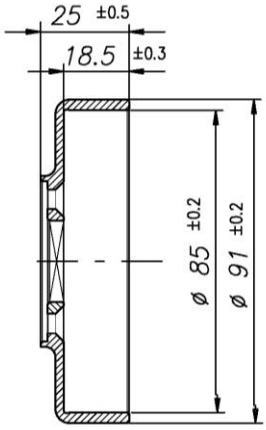



## REEDS DIMENSIONS / *CLAPETS*

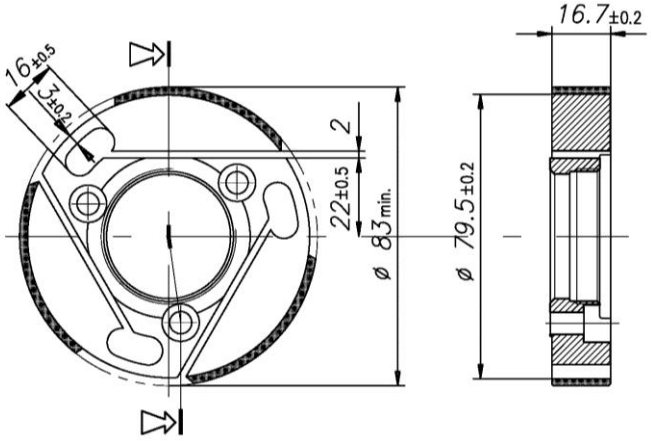


## DESCRIPTION OF THE CLUTCH - *DESCRIPTION DE L' EMBRAYAGE*




Min. weight 225 g
*Poids min. 225g*

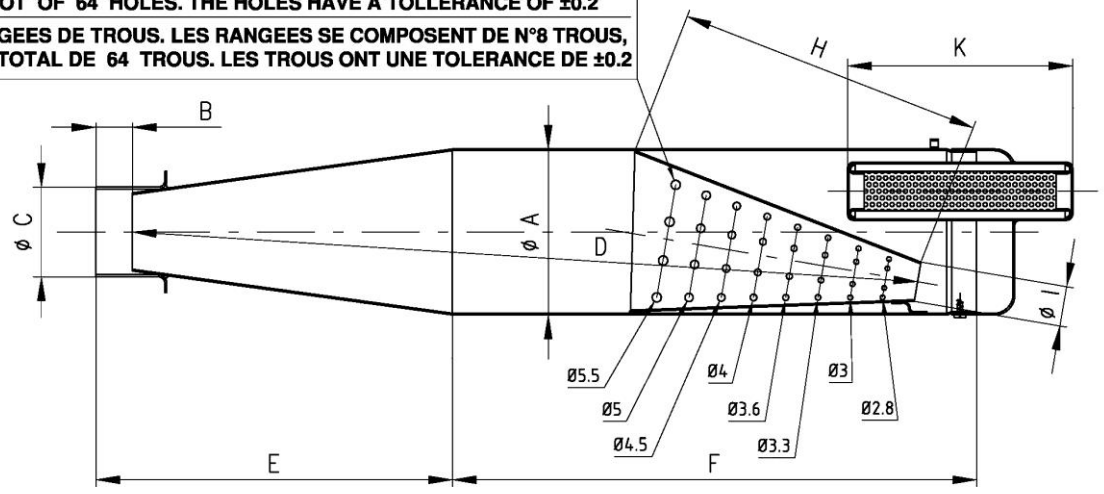



Min. weight 375 g
*Poids min. 375g*

## EXHAUST MUFFLER VIEW AND DIMENSIONS
## *VUE ET DIMENSIONS DU SILENCIEUX D' ECHAPPEMENT*

**N° 8 ROWS OF HOLES. THE ROWS ARE COMPOSED OF N°8 HOLES, FOR A TOT OF 64 HOLES. THE HOLES HAVE A TOLLERANCE OF ±0.2**

**N° 8 RANGEES DE TROUS. LES RANGEES SE COMPOSENT DE N°8 TROUS, POUR UN TOTAL DE 64 TROUS. LES TROUS ONT UNE TOLERANCE DE ±0.2**

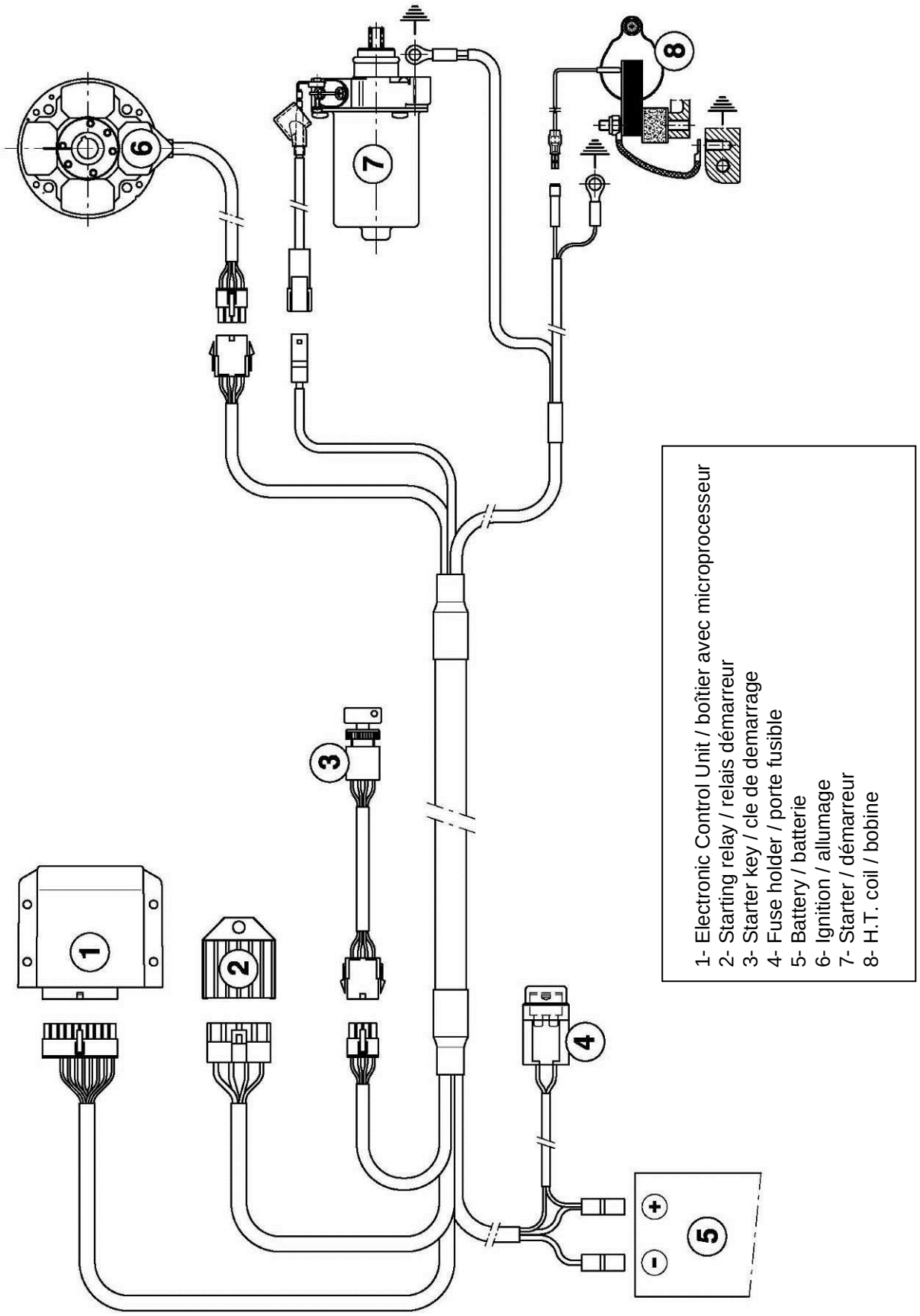



A: 100 ±1 øext. D: 485 ±5 H: 180 ±5
B: 22 ±1 E: 218 ±5 I: 24 ±2 øext.
C: 54 ±1 øext. F: 315 ±3 K: 130 ±3

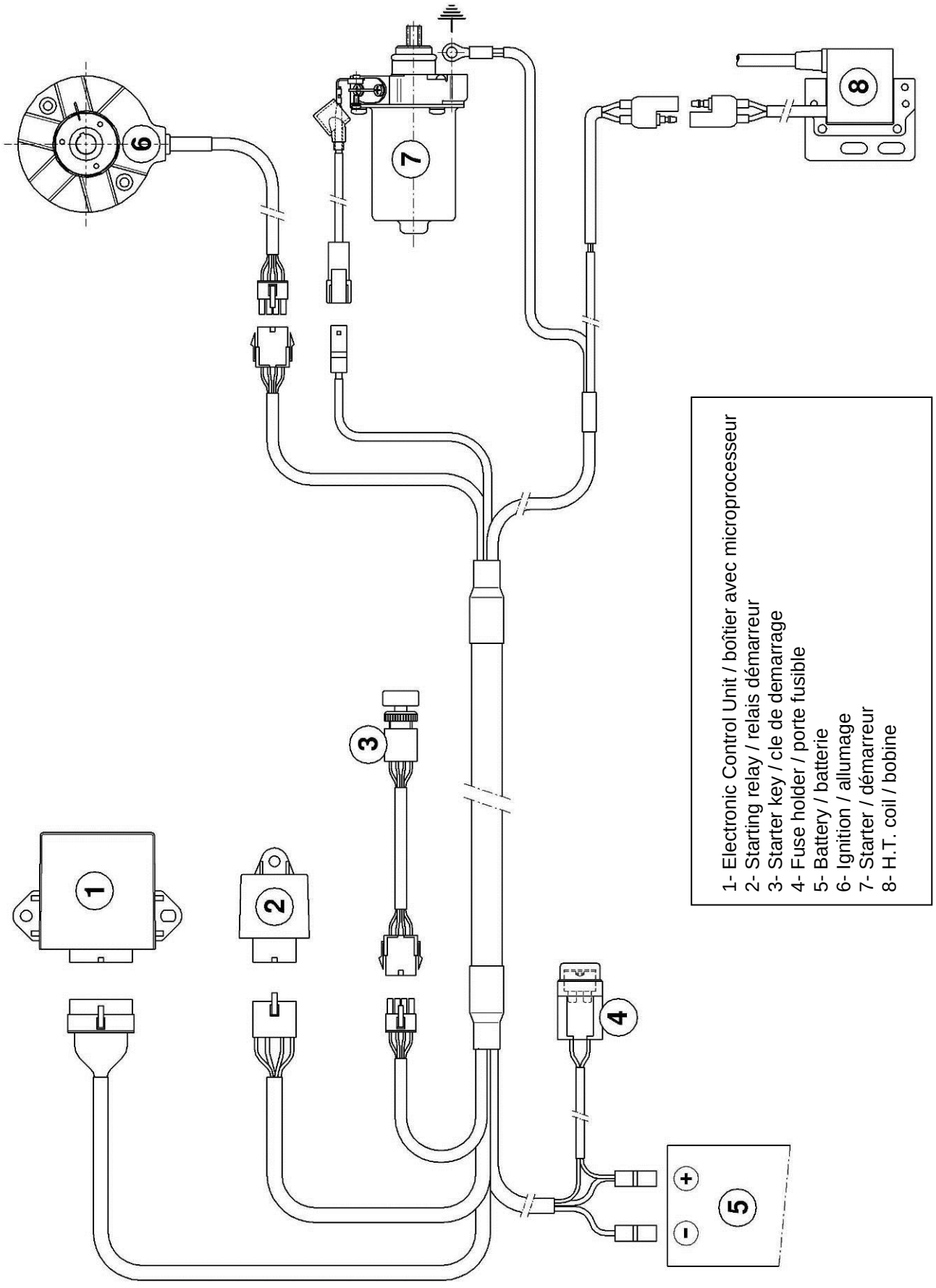
Min. weight 1.39 Kg
Poids min. 1.39 Kg

WIRING DIAGRAM ( SELETTRA DIGITAL ‘’K’’ IGNITION )

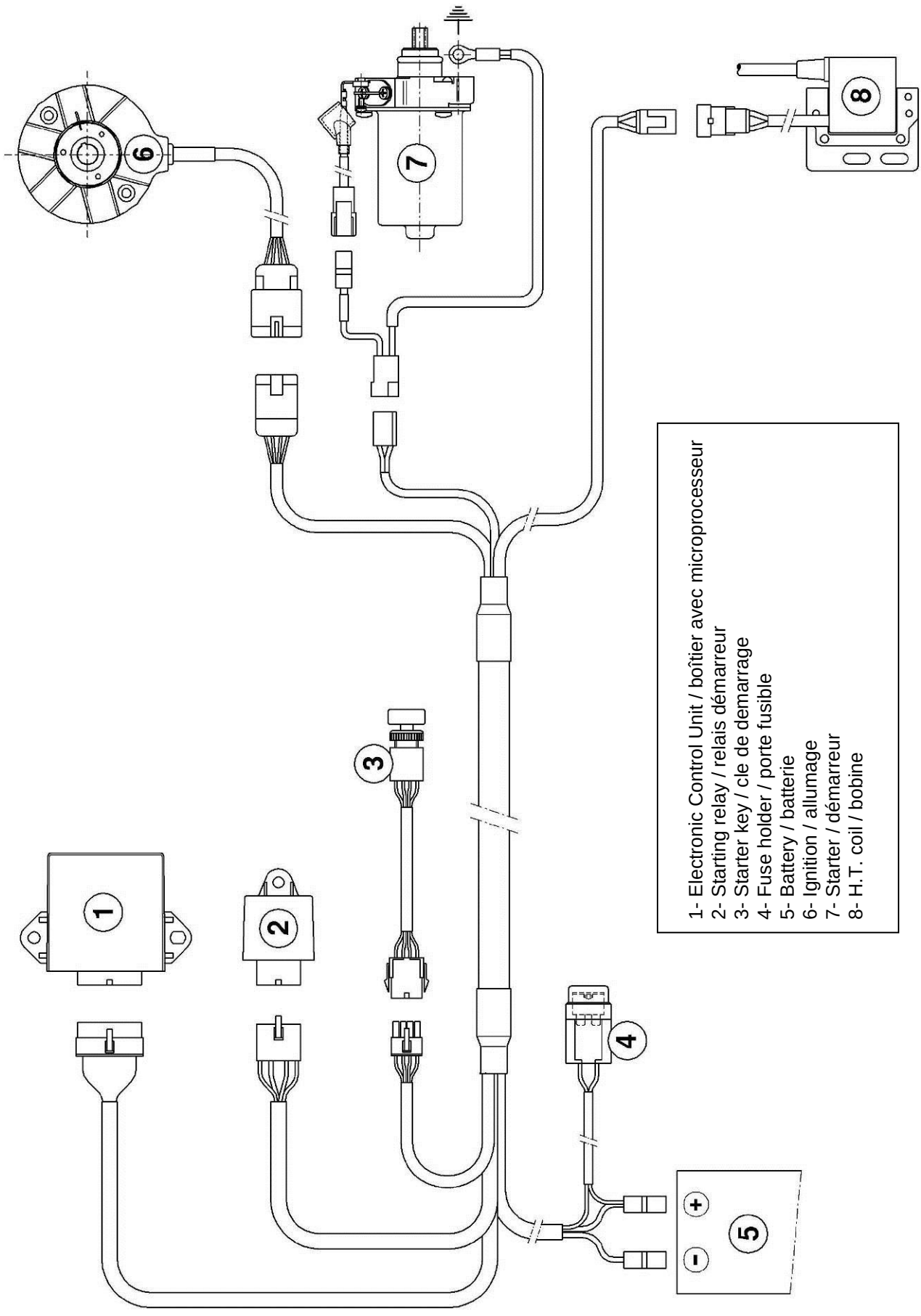
*SCHEMA CIRCUIT ELECTRIQUE ( ALLUMAGE SELETTRA DIGITAL ’’K’’ )*



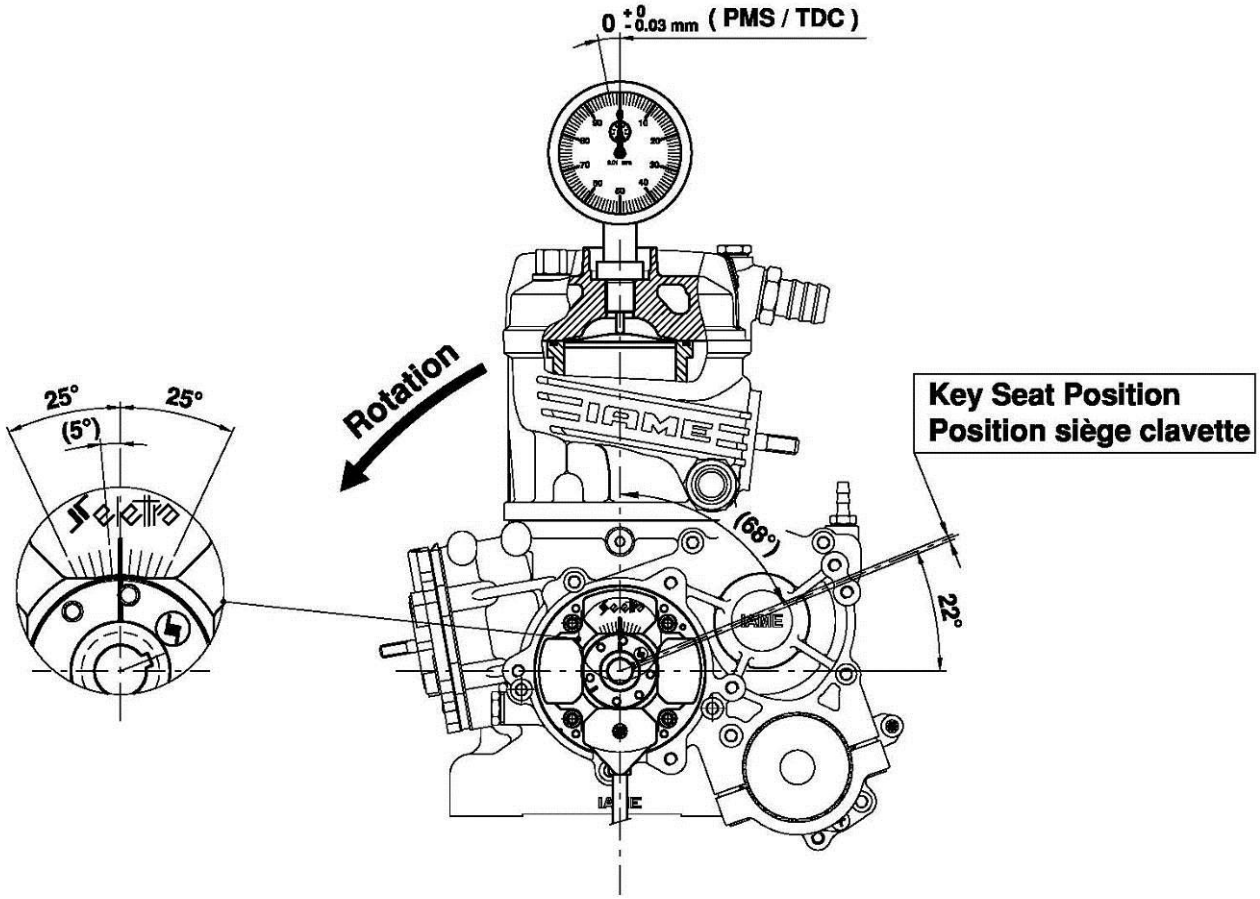
# WIRING DIAGRAM ( PVL IGNITION, 1st TYPE )
## *SCHEMA CIRCUIT ELECTRIQUE ( ALLUMAGE PVL, 1er TYPE )*



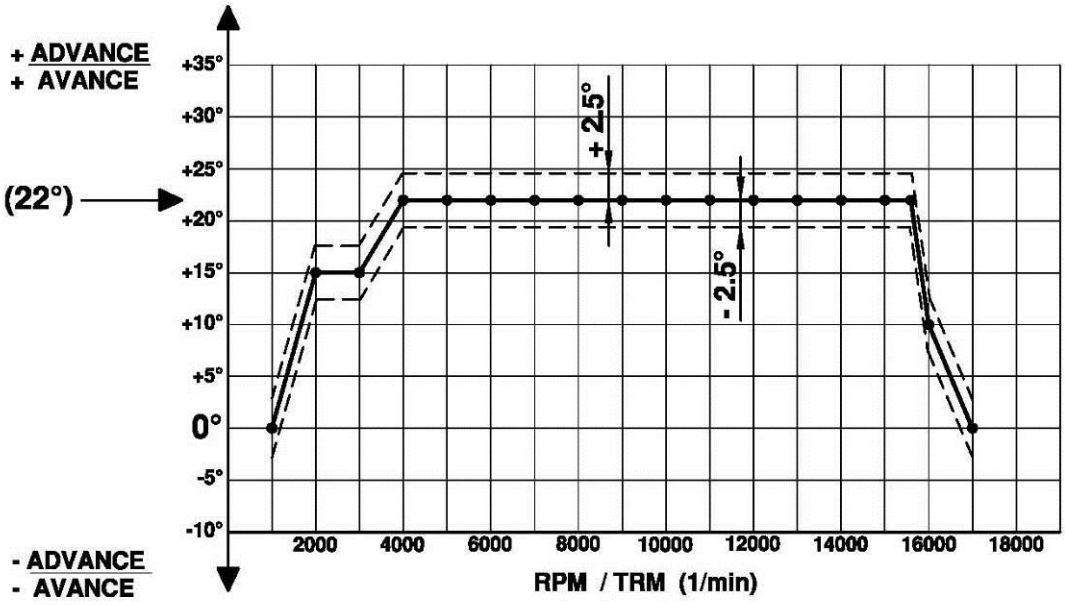
# WIRING DIAGRAM ( PVL IGNITION, 2nd TYPE )
## *SCHEMA CIRCUIT ELECTRIQUE ( ALLUMAGE PVL, 2ème TYPE )*



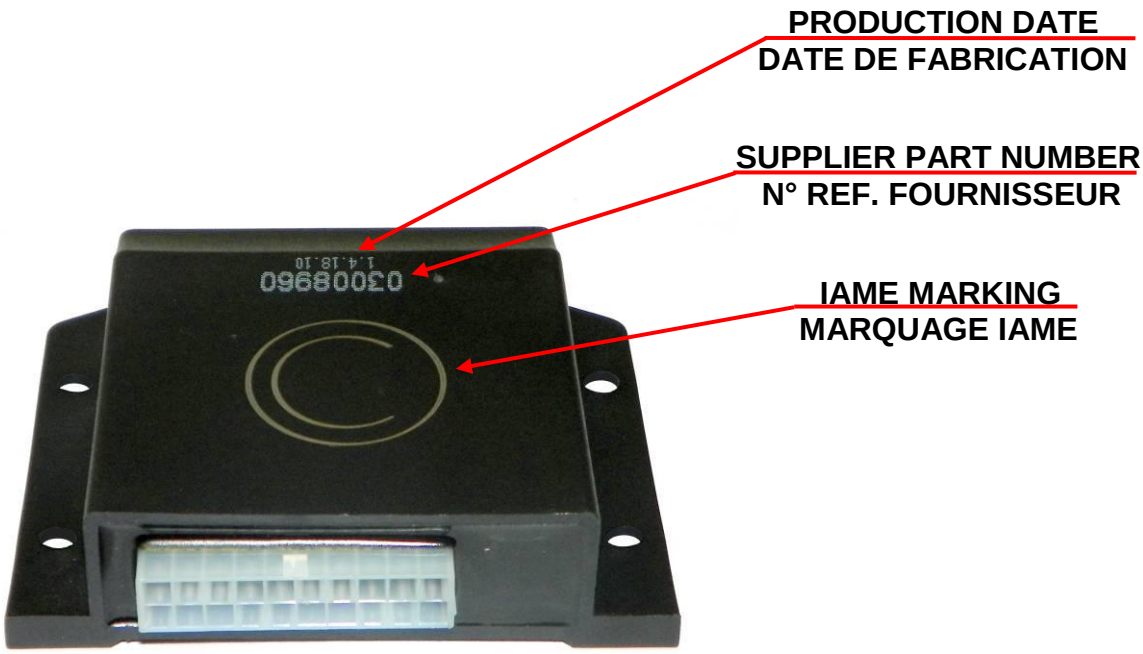
SCHEME FOR ADVANCE CONTROL
*SCHEMA DE CONTROLE POUR L'AVANCE*



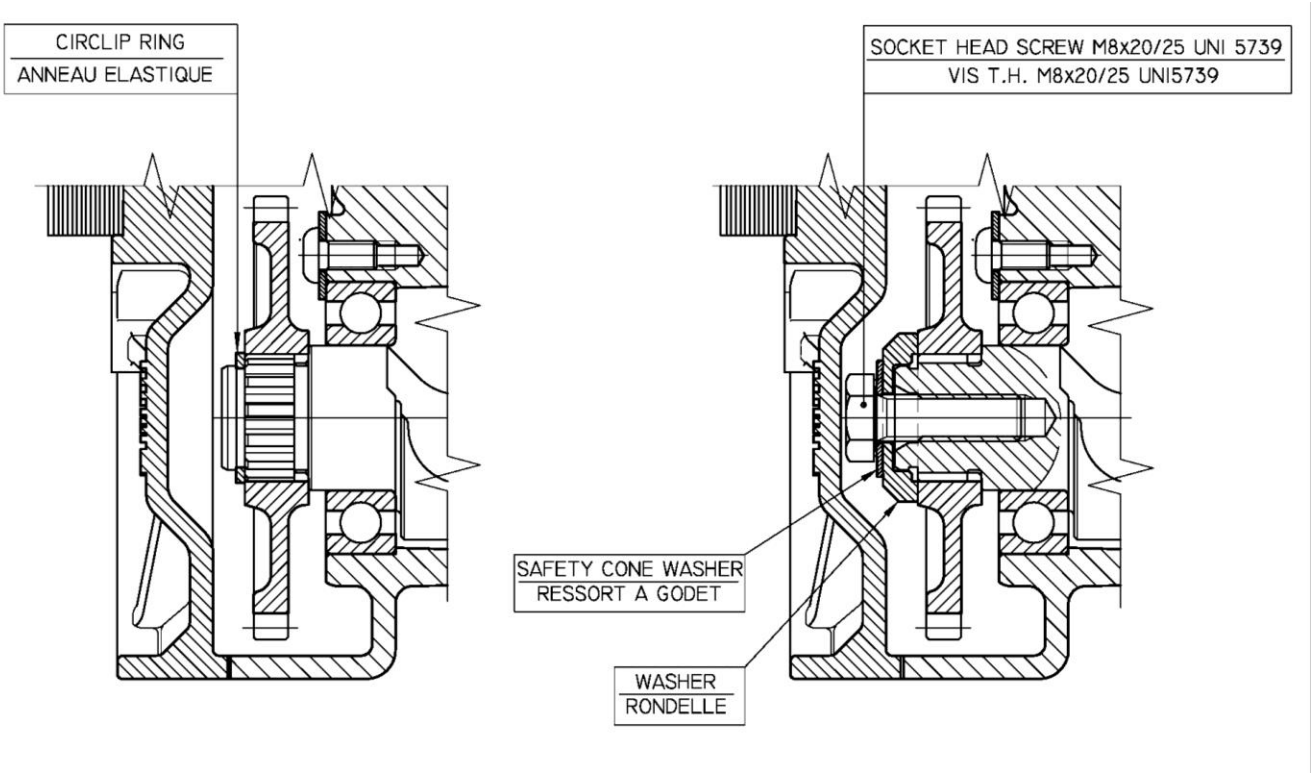

**ADVANCE CURVE GRAPHS / GRAPHIQUES DE LA COURBE D'AVANCE**

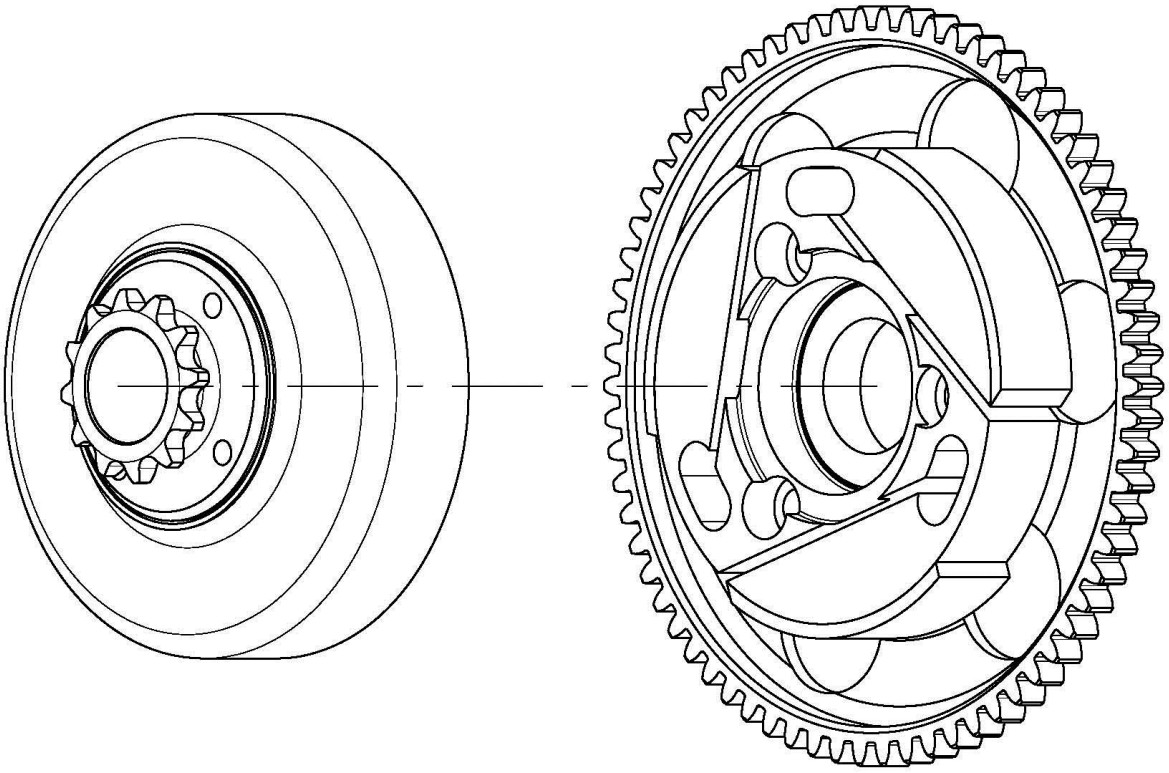


## ELECTRONIC BOX MARKING
*MARQUAGE DU BOITIER ELECTRONIQUE*




## GEAR ALTERNATIVE FIXING
*FIXATION ALTERNATIVE DE L' ENGRANAGE*

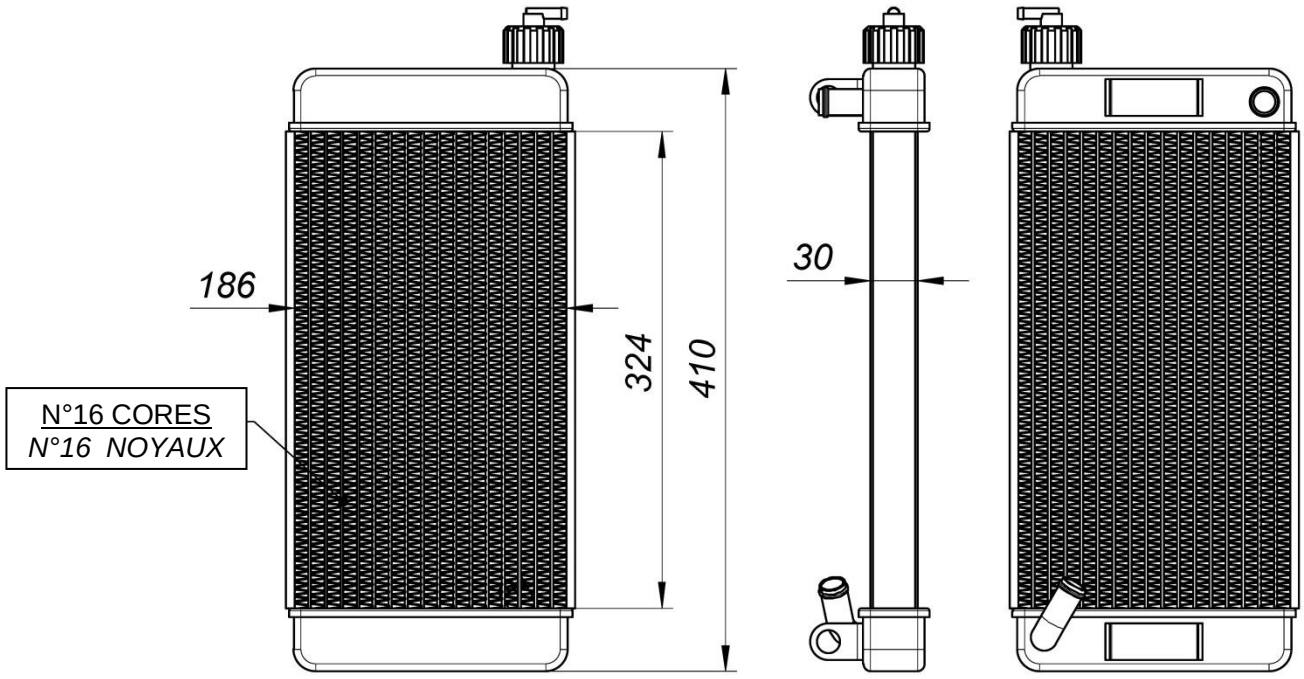




Min. weight 300 g
*Poids min. 300 g*

Min. weight 680 g
*Poids min. 680 g*

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

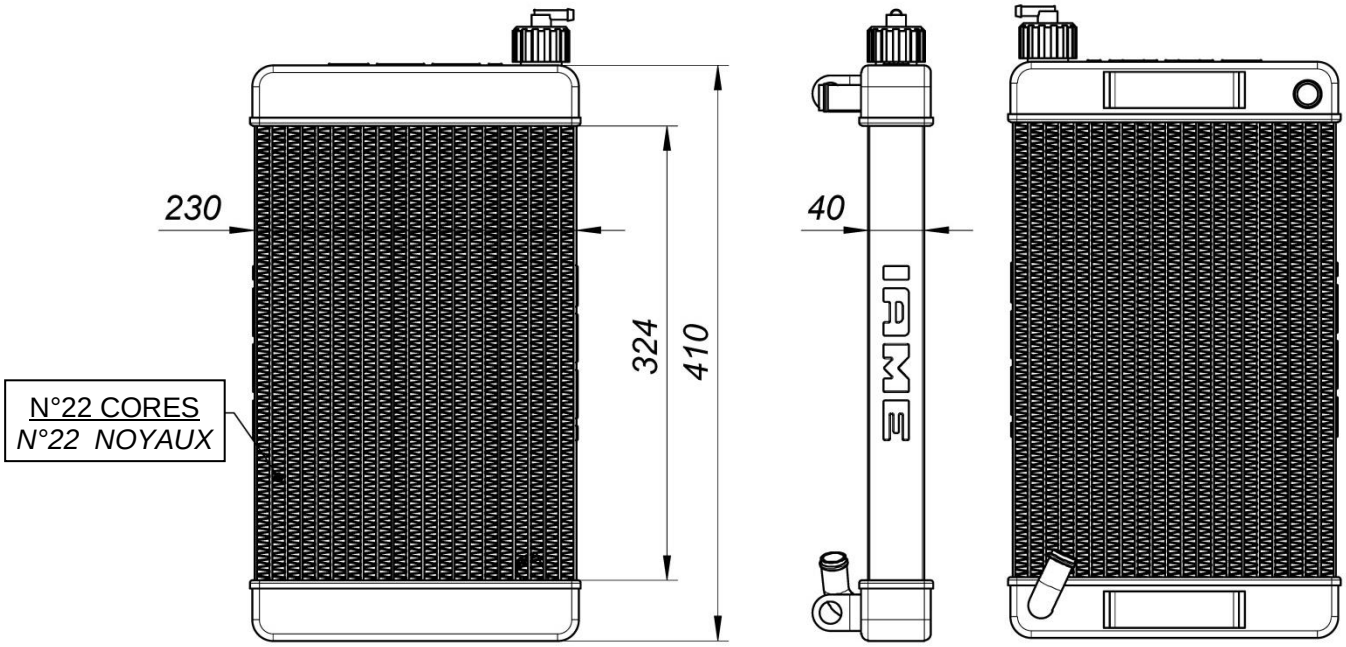



**FRONT / *AVANT*** **REAR / *ARRIERE***

PAINTED AND NOT PAINTED
*PEINT ET PAS PEINT*

**FRONT / *AVANT*** **REAR / *ARRIERE***

RADIATOR ALTERNATIVE DESCRIPTION AND SKETCH
*DESCRIPTION DU RADIATEUR ALTERNATIVE*



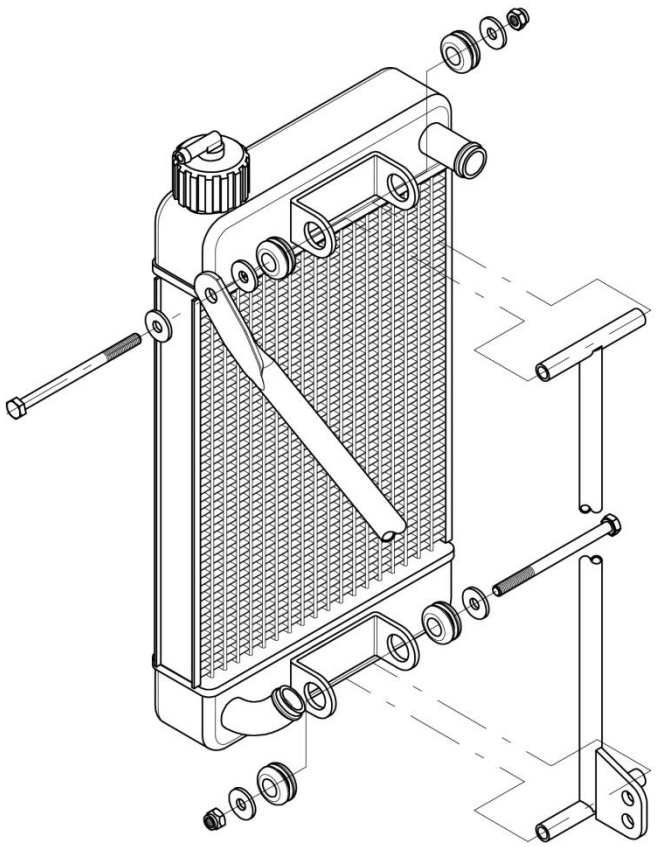

**FRONT /** ***AVANT***

**REAR /** ***ARRIERE***

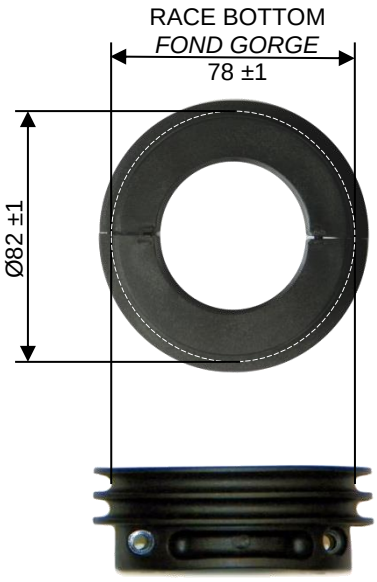
**FRONT /** ***AVANT***

**REAR /** ***ARRIERE***

## RADIATOR AND ITS SUPPORTS
*RADIATEUR ET SES SUITIEN*



## WATER PUMP GROUP
*GROUPE POMPE A' EAU*



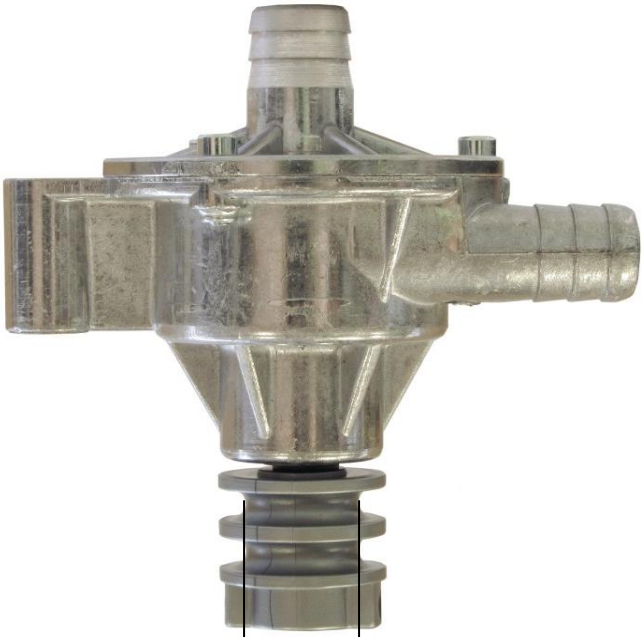

RACE BOTTOM
*FOND GORGE*
Ø19 ±1

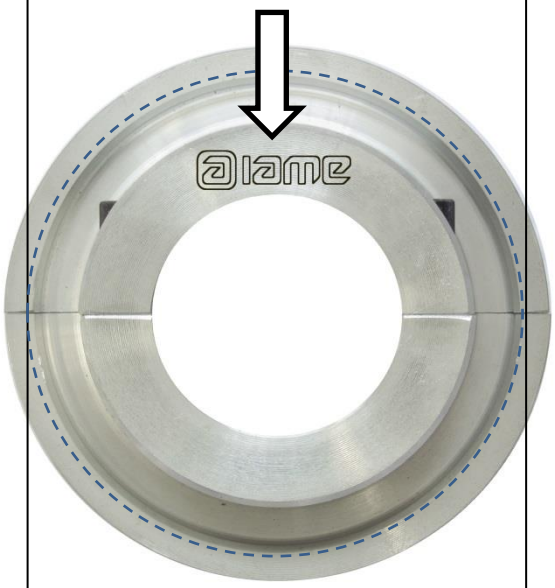
THERMOSTAT



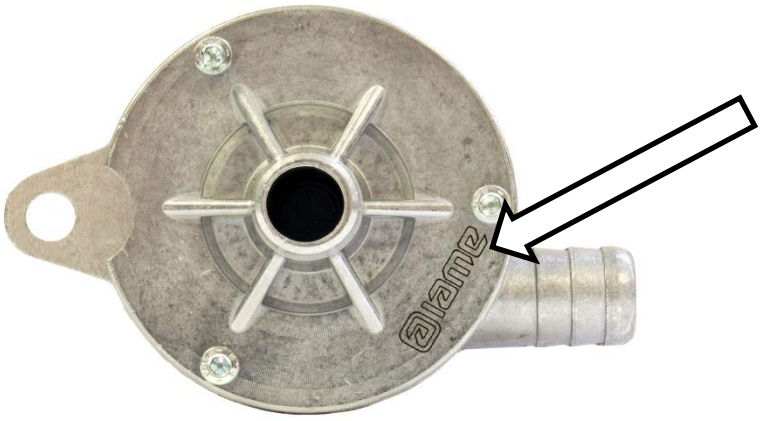
ALTERNATIVE

ALTERNATIVE WATER PUMP & PULLEY
*ALTERNATIVE GROUPE POMPE A' EAU ET POULIE*






RACE BOTTOM - *FOND GORGE*
Ø20 ±1



PISTON IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION PISTON*

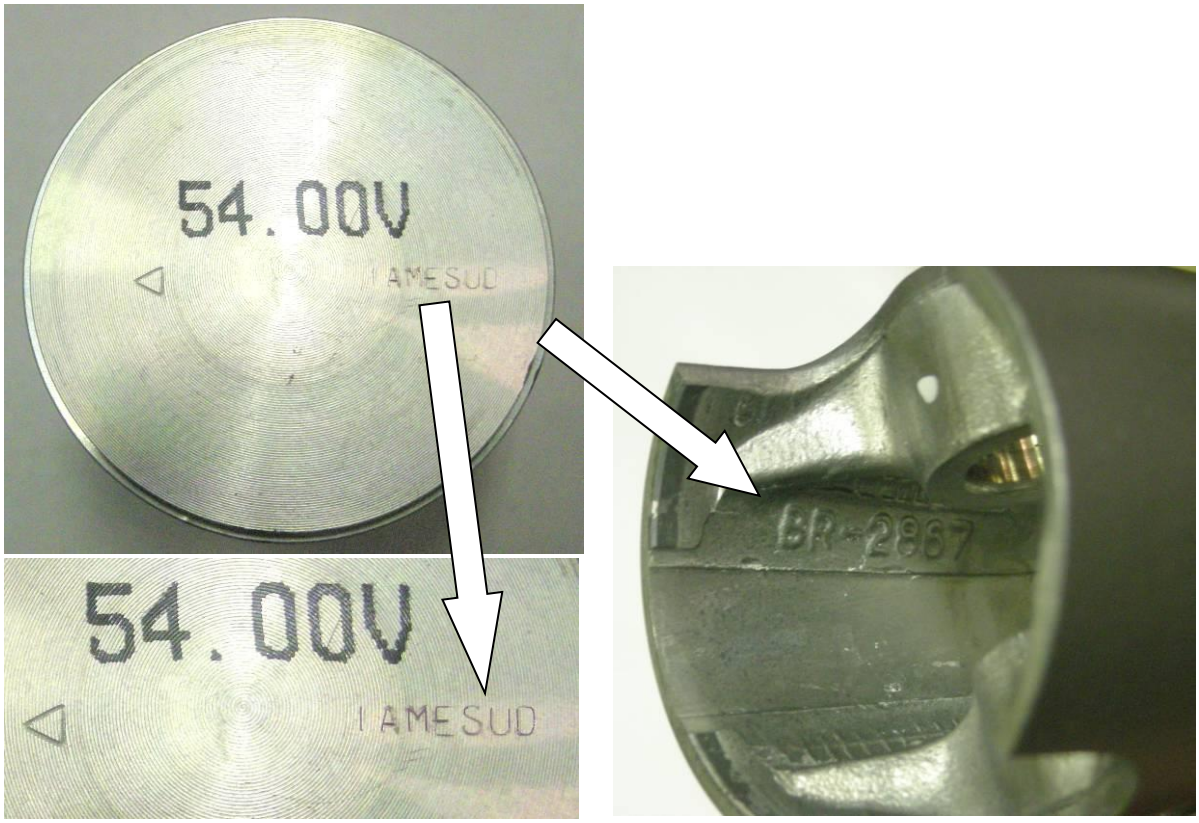
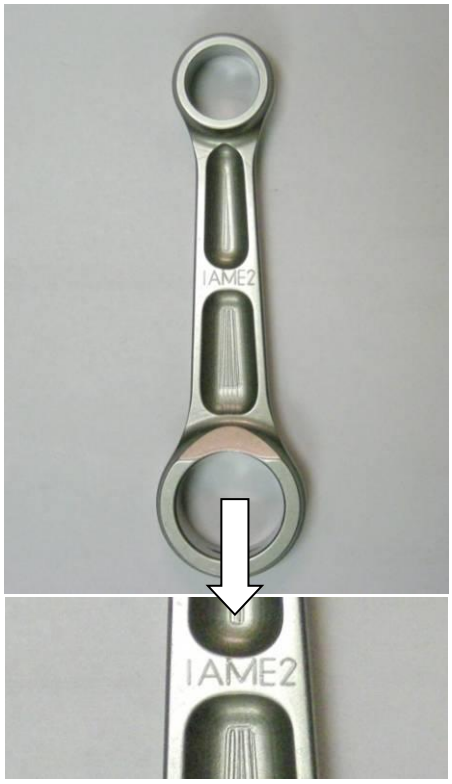
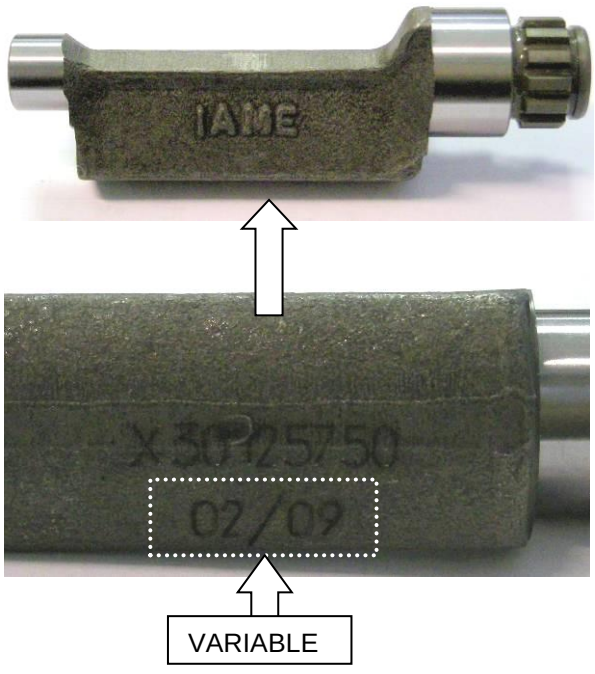



PHOTO IDENTIFICATION CONROD
*MARQUAGE D'IDENTIFICATION BIELLE*

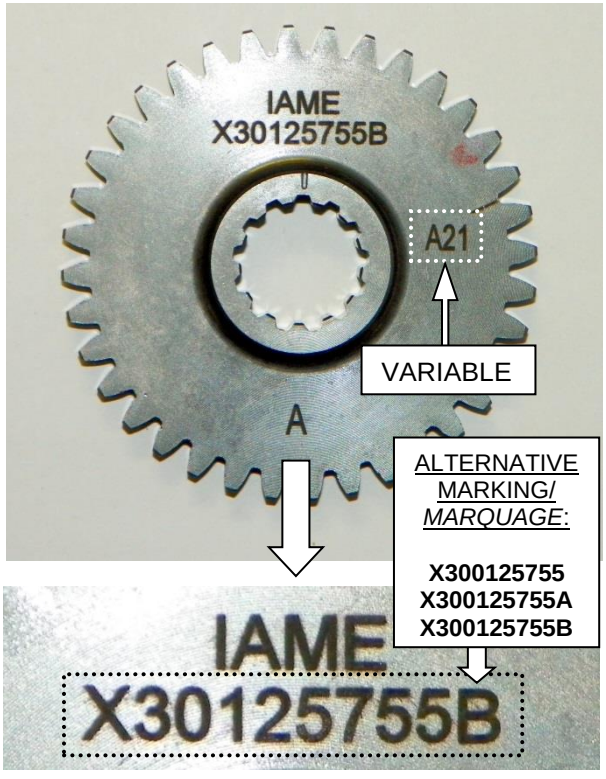



IDENTIFICATION BALANCING SHAFT MARKING
*MARQUAGE D'IDENTIFICATION ARBRE D'EQUILIBRAGE*

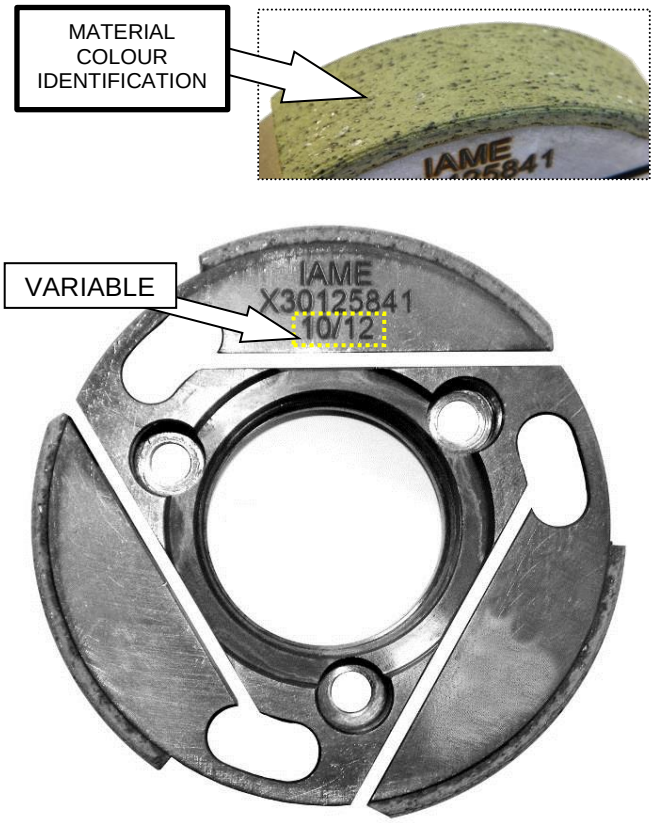
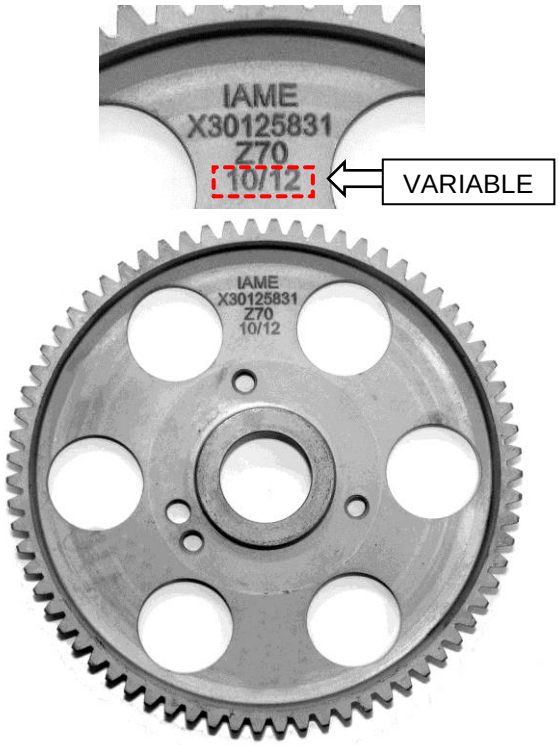
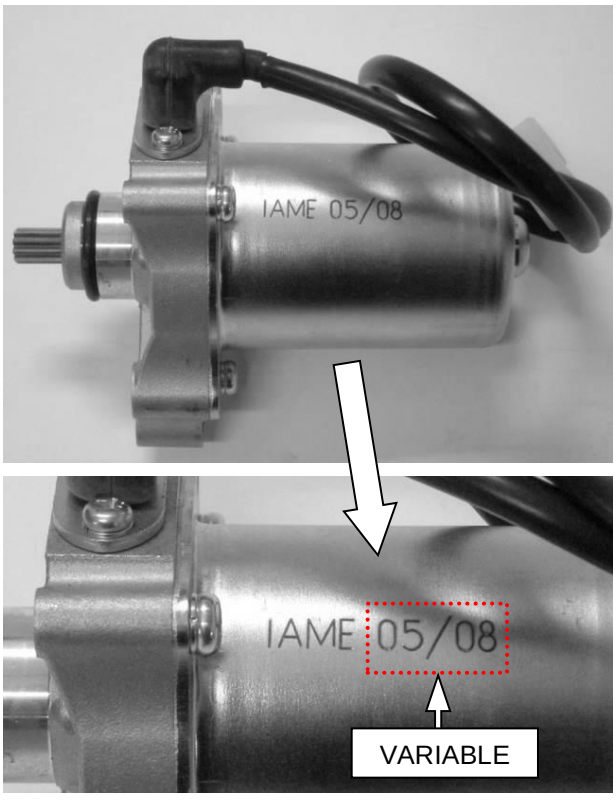


CRANKSHAFT IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU VILEBREQUIN*

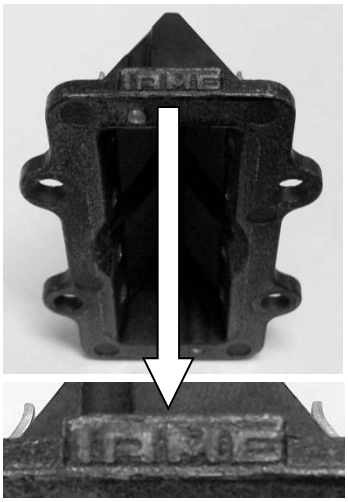

GEAR COMMAND BALANCING SHAFT IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION ENGRENAGE ARBRE D'EQUILIBRAGE*

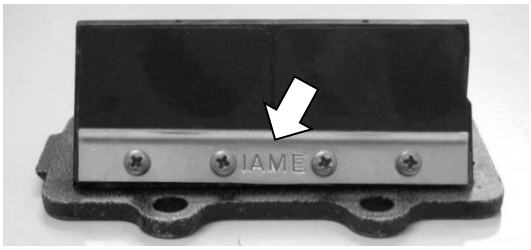



SPROCKET IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU PIGNON*

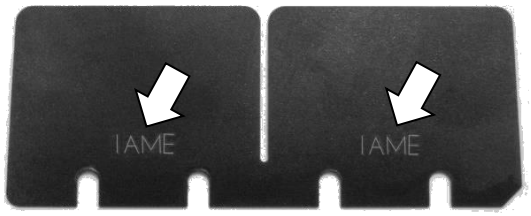
| CLUTCH BODY IDENTIFICATION MARKING<br>*MARQUAGE D'IDENTIFICATION CORPS DE EMBRAYAGE* | CLUTCH DRUM IDENTIFICATION MARKING<br>*MARQUAGE D'IDENTIFICATION DE LA CALOTTE* |
|---|---|
|  |  |
| STARTER RING IDENTIFICATION MARKING<br>*MARQUAGE D'IDENTIFICATION DE LA COURONNE DE DEMARRAGE* | STARTER IDENTIFICATION MARKING<br>*MARQUAGE D'IDENTIFICATION DU MOTEUR DEMARREUR* |
|  |  |

## REED GROUP & PETALS IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DE LA PYRAMIDE DE CLAPETS & CLAPETS*



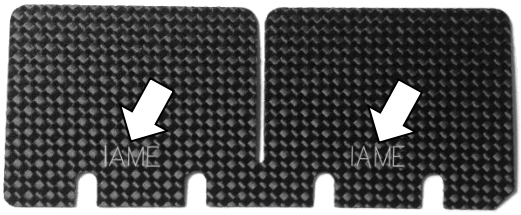




VETRONITE

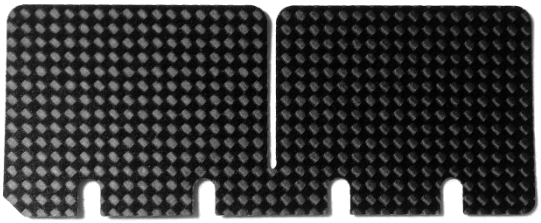



CARBON FIBER

FRONT SIDE

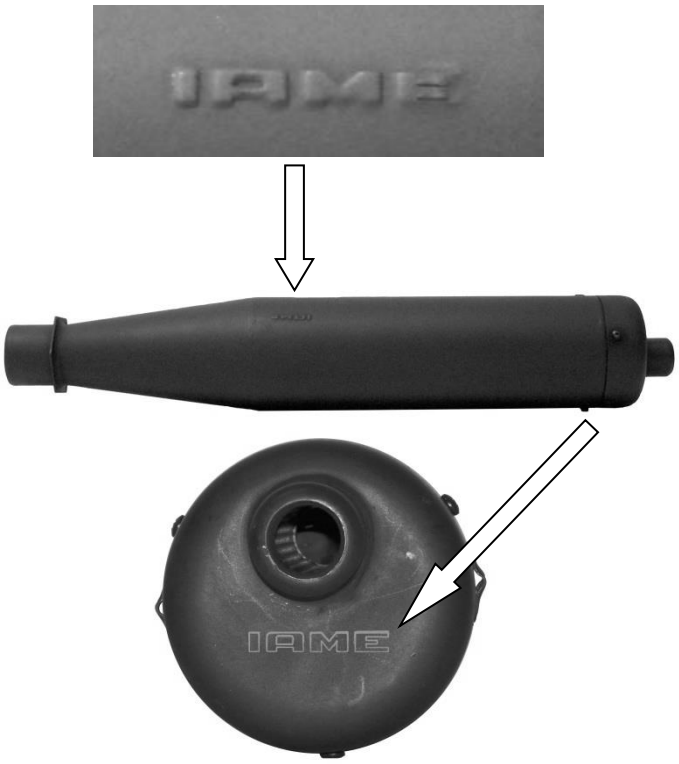



REAR SIDE



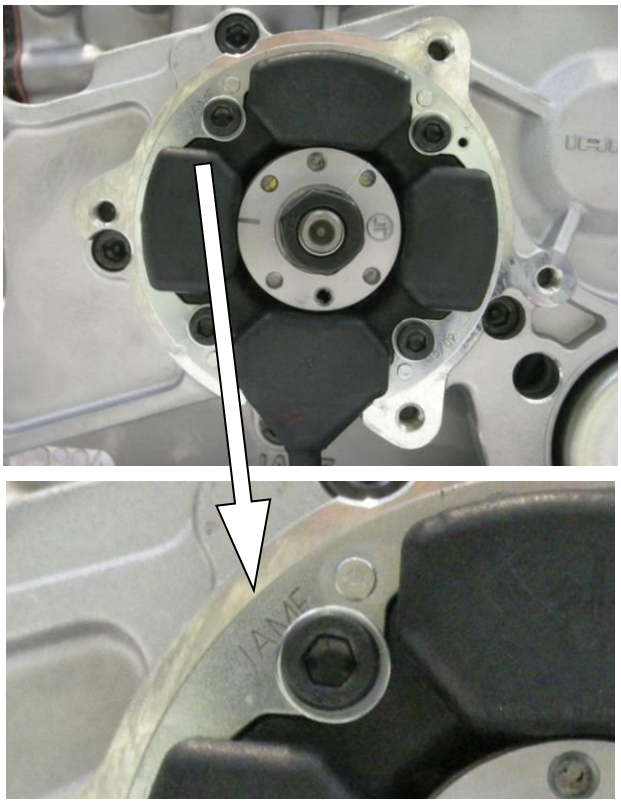
## PHOTO IDENTIFICATION CARBURETOR INLET CONVEYOR
*MARQUAGE D'IDENTIFICATION DU COLLECTEUR D'ASPIRATION*


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

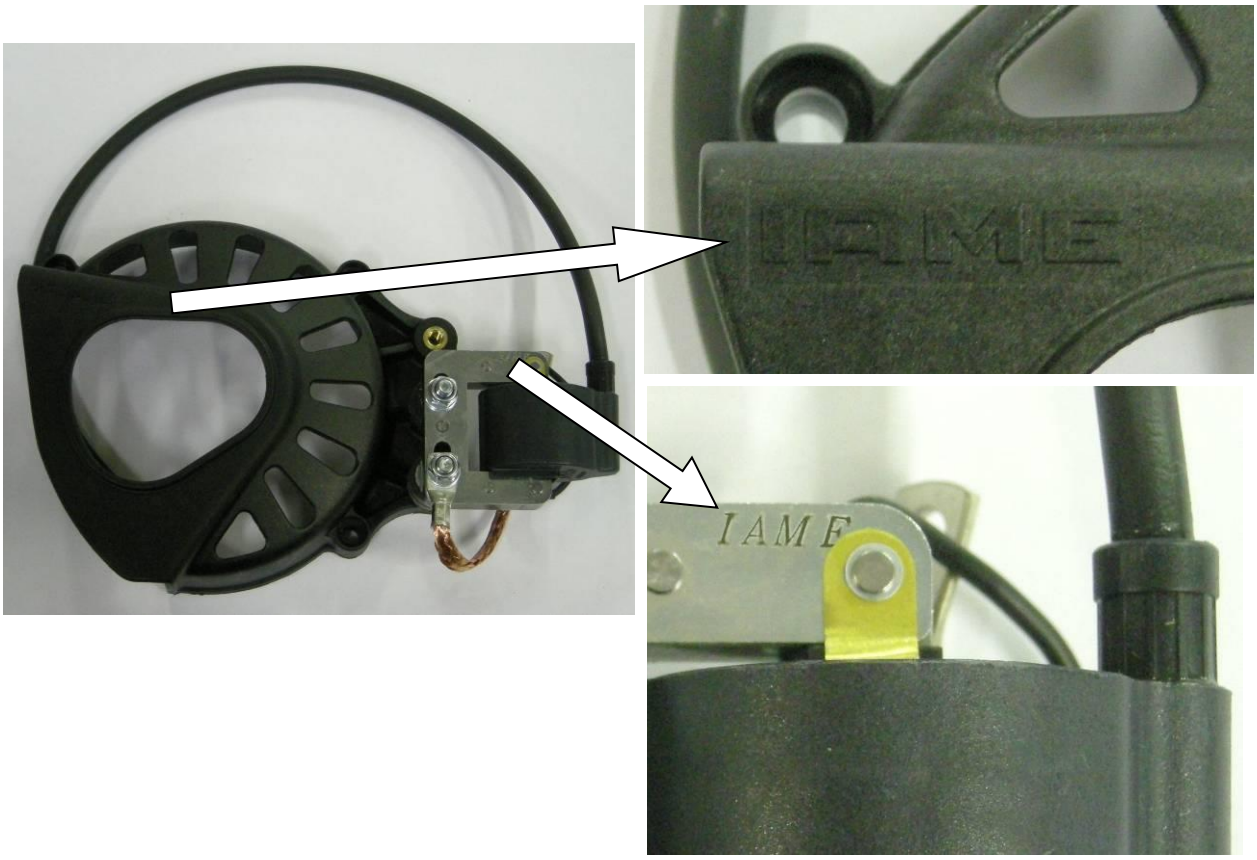


HEADER EXHAUSTIDENTIFICATION MARKING
*MARQUAGE DU COUDE D'ECHAPPEMENT*

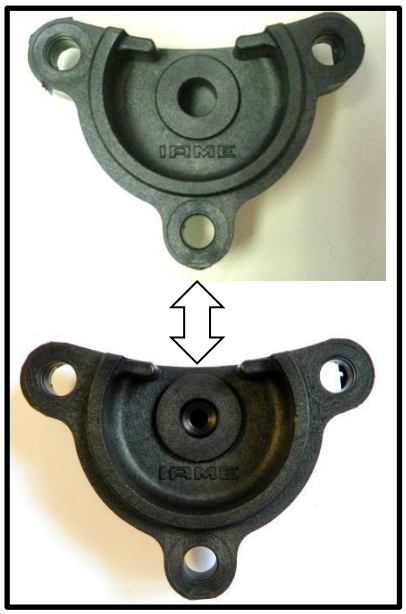

STATOR IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU STATOR*

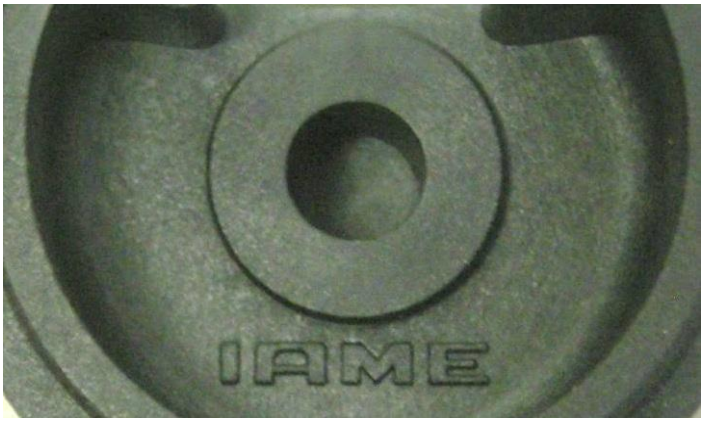



CLUTCH COVER AND H.T. COIL IDENTIFICATION MARKING
*MARQUAGE DU COUVERCLE D'EMBRAYAGE ET DE LA BOBINE*



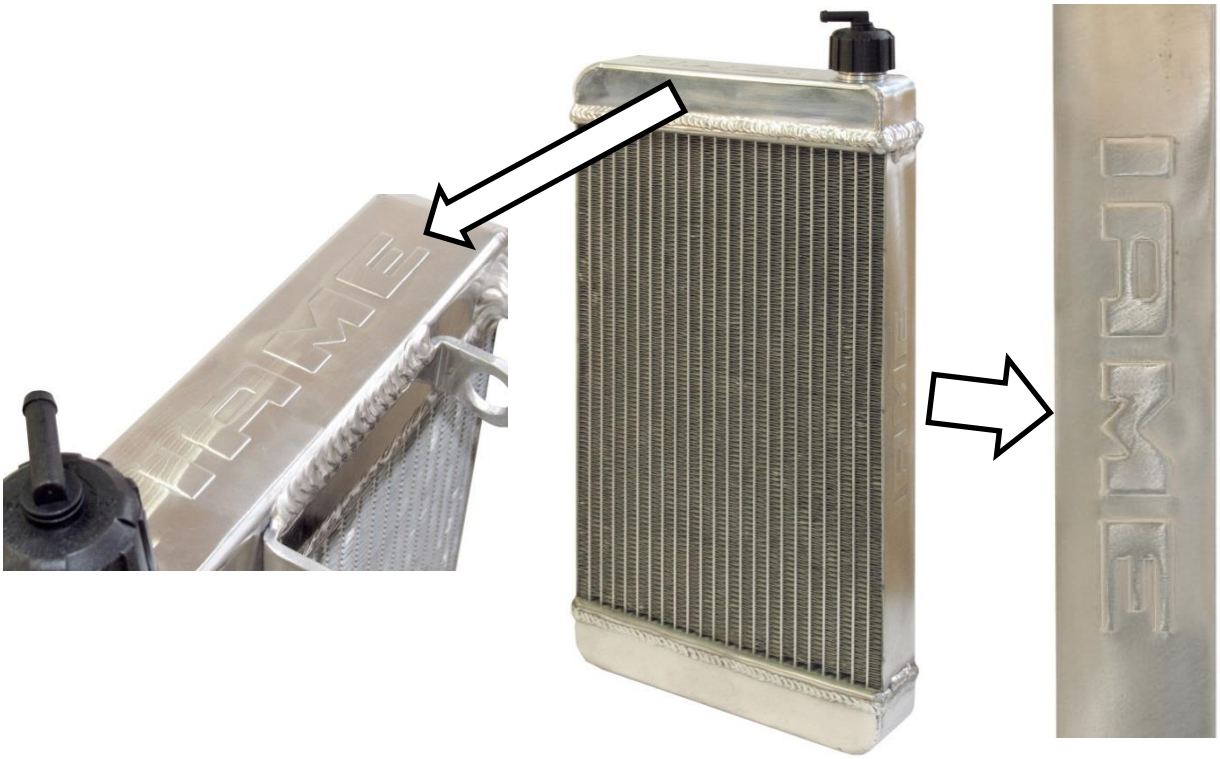
BENDIX COVER IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU COUVERCLE DU CONTRE-ARBRE DE DEMARRAGE*



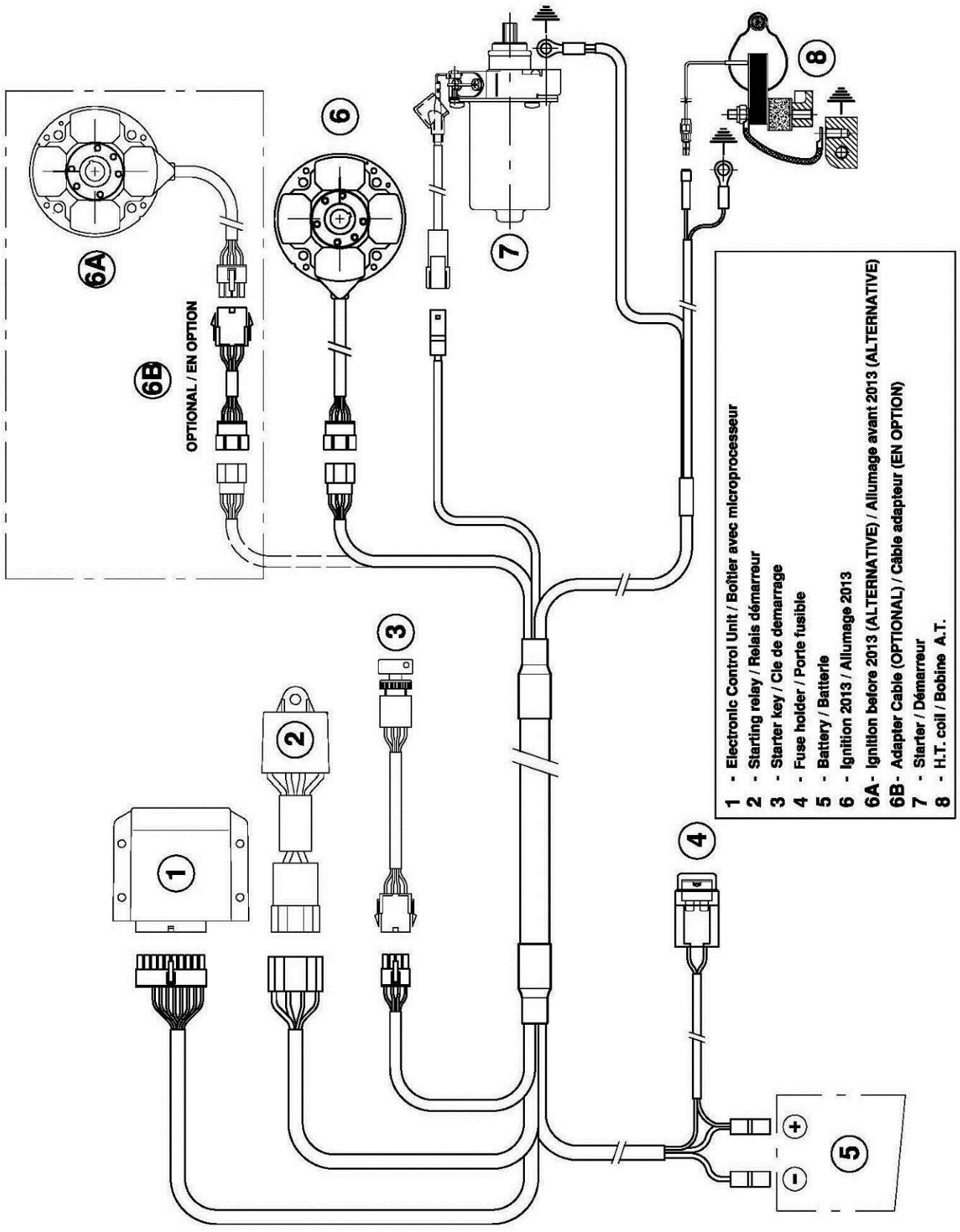

**ALTERNATIVE**


ALTERNATIVE RADIATOR IAME IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU RADIATOR ALTERNATIVE*



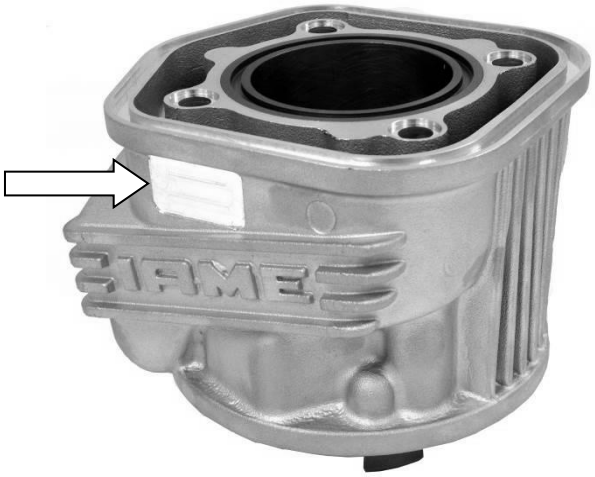
WIRING DIAGRAM ( SELETTRA DIGITAL ‘’K’’ IGNITION 2013 )

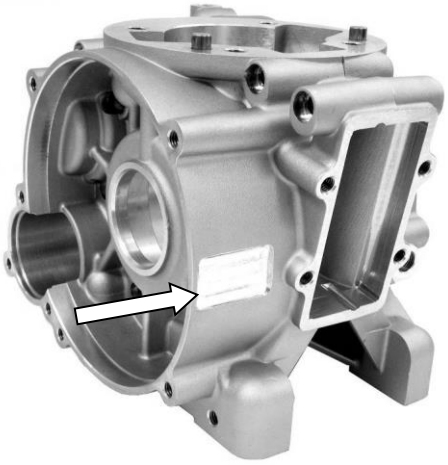
*SCHEMA CIRCUIT ELECTRIQUE ( ALLUMAGE SELETTRA DIGITAL ’’K’’ 2013 )*



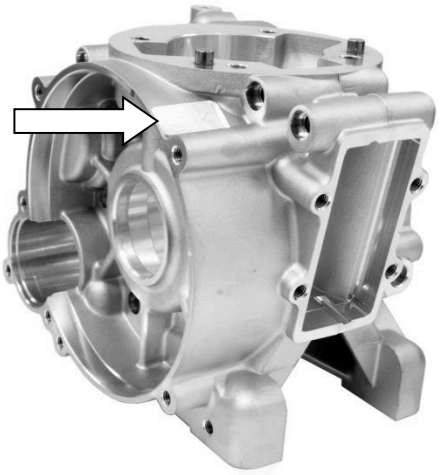
# FROM 2014 ON - A PARTIR DE 2014

STICKER APPLICATION AREA - *ESPACE POUR L'APPLICATION DE ADHÉSIFS*

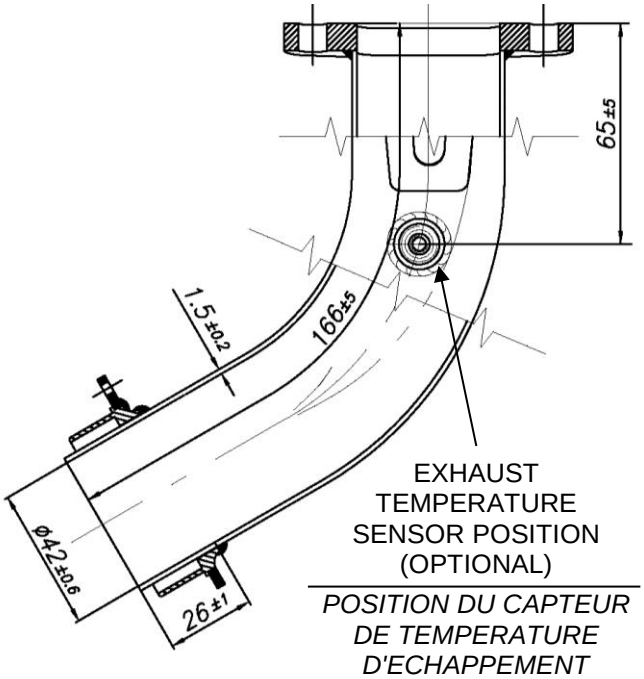




ALTERNATIVE AREA



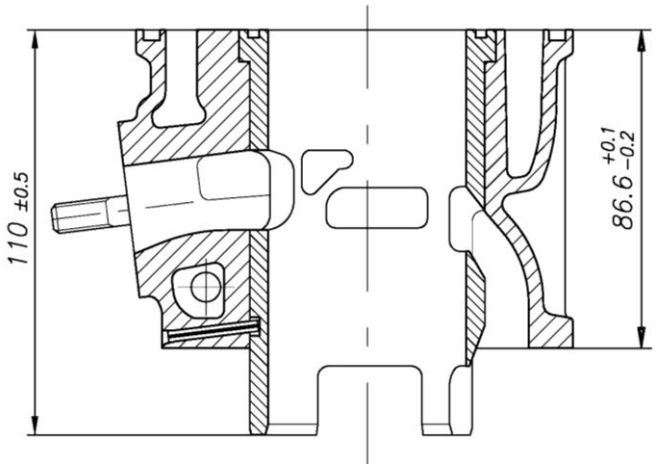
HEADER EXHAUST DIMENSIONS
*CODE D'ECHAPPEMENT TAILLE*



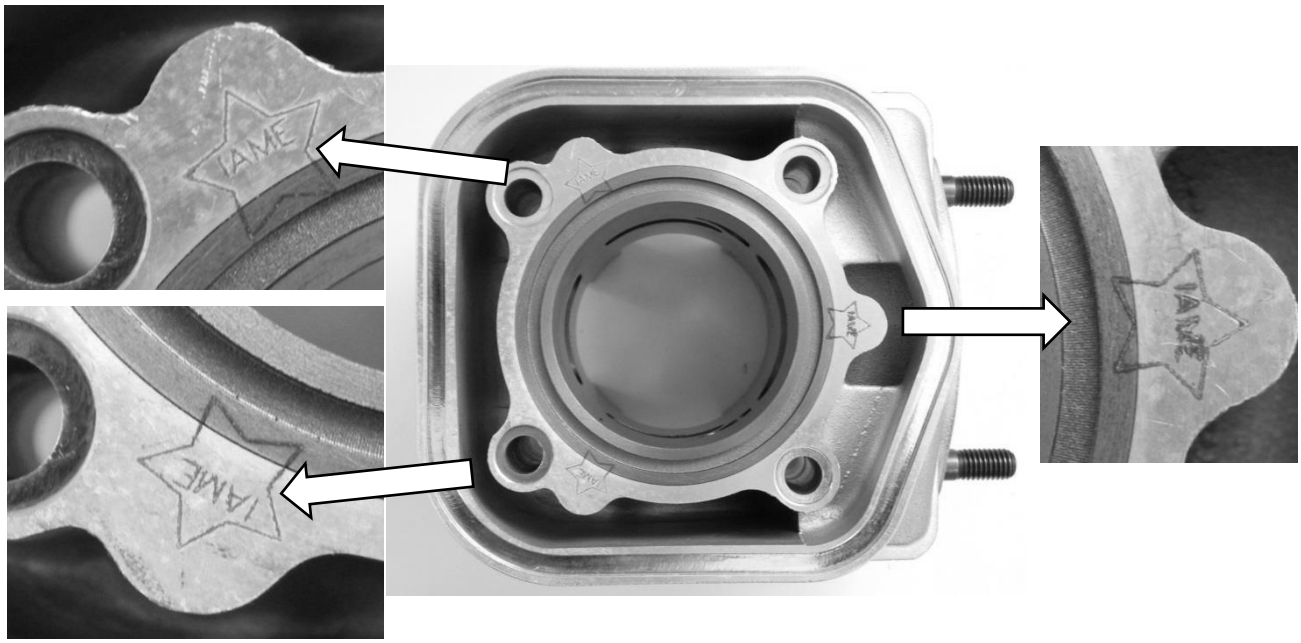

EXHAUST TEMPERATURE SENSOR POSITION (OPTIONAL)

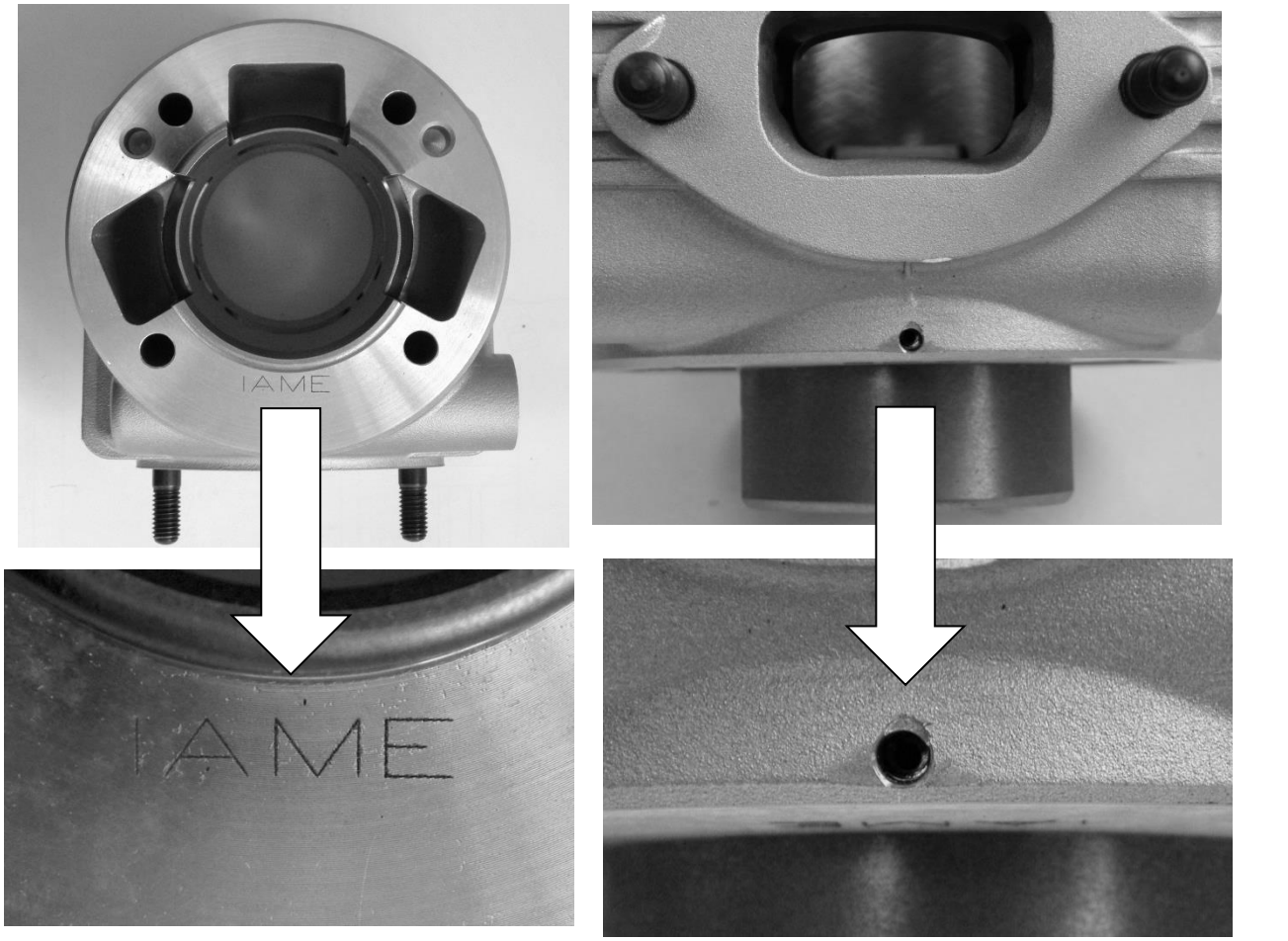
*POSITION DU CAPTEUR DE TEMPERATURE D'ECHAPPEMENT (EN OPTION)*

CYLINDER CROSS SECTION VIEW
*VUE EN SECTION DU CYLINDRE*



CYLINDER IDENTIFICATION MARKING
*MARQUAGE D'IDENTIFICATION DU CYLINDRE*



ALTERNATIVE PUSH BUTTONS – START & STOP
*BOUTONS "START & STOP" DU DEMARREUR ALTERNATIVE*

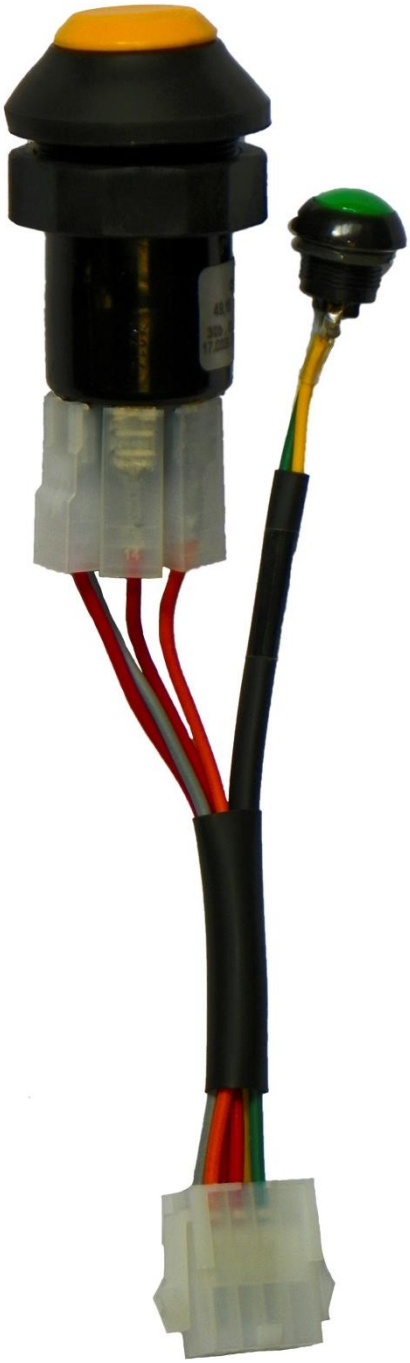
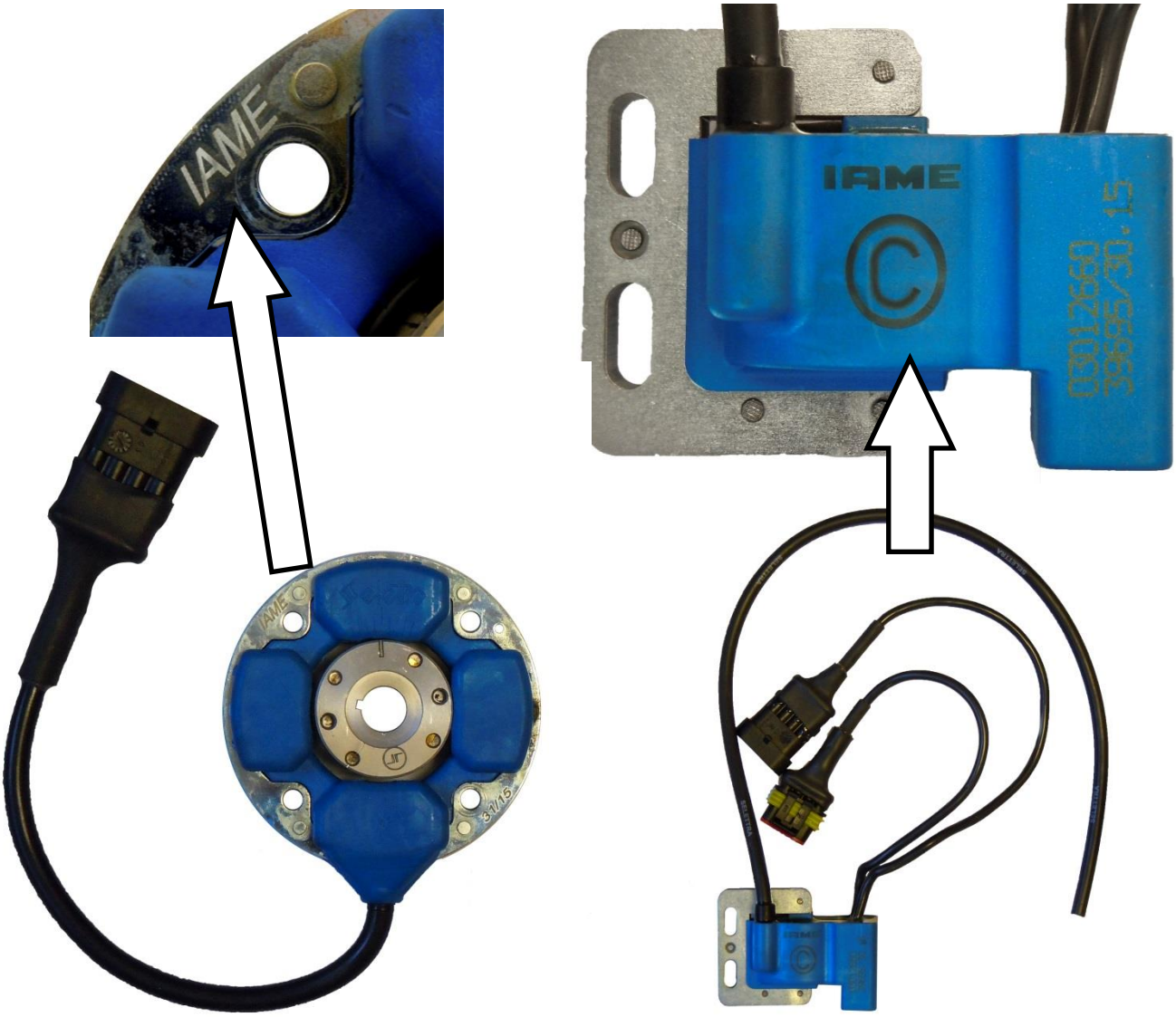
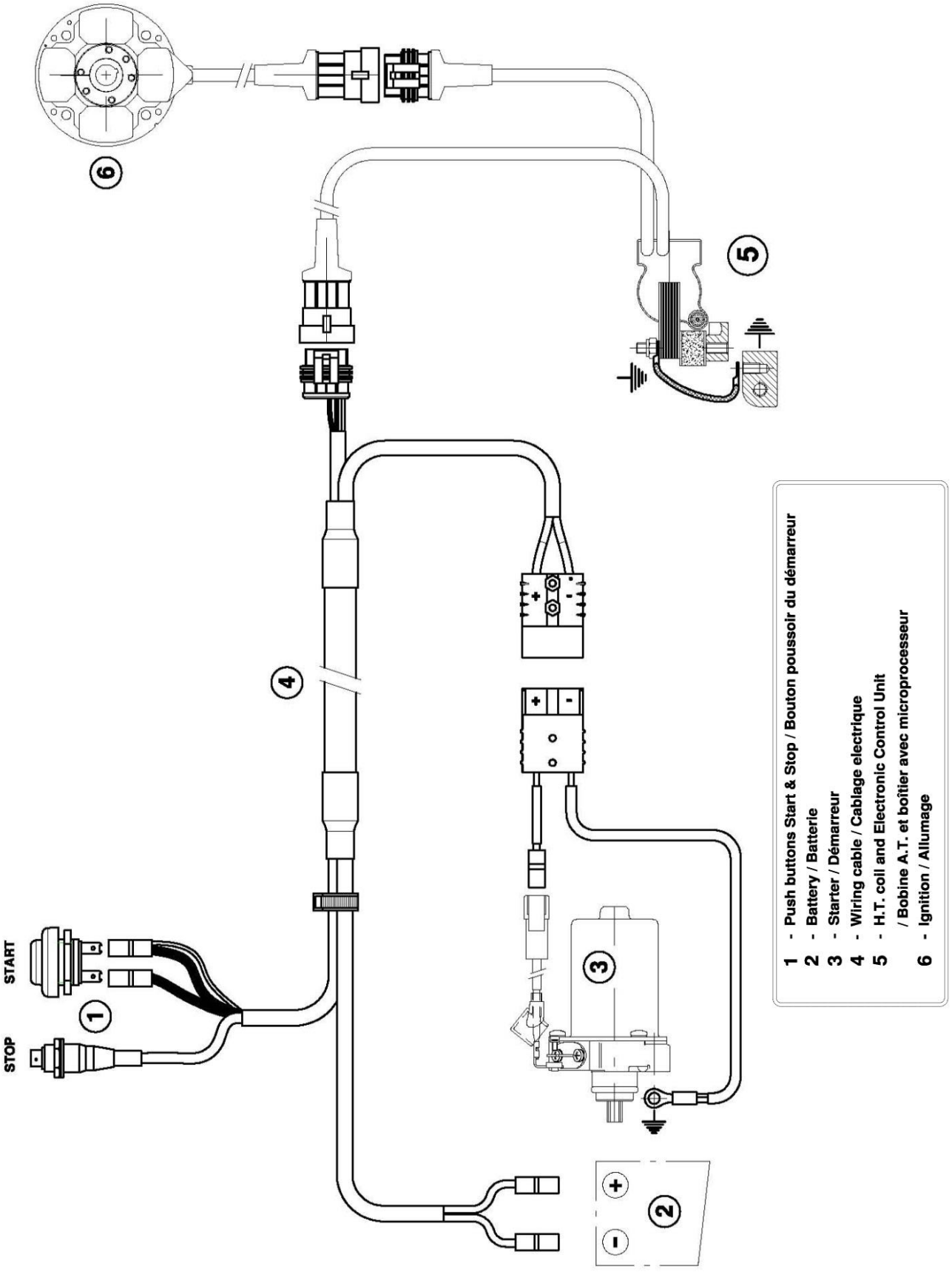


PHOTO COMPLETE ALTERNATIVE WIRING LOOM
*PHOTO DU CABLAGE ELECTRONIQUE COMPLETE*

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" )*



## ALTERNATIVE WIRING LOOM
*CABLAGE ELECTRONIQUE COMPLET ALTERNATIVE*

## ALTERNATIVE WIRING LOOM DIAGRAM
*SCHEMA CIRCUIT ELECTRIQUE ALTERNATIVE*

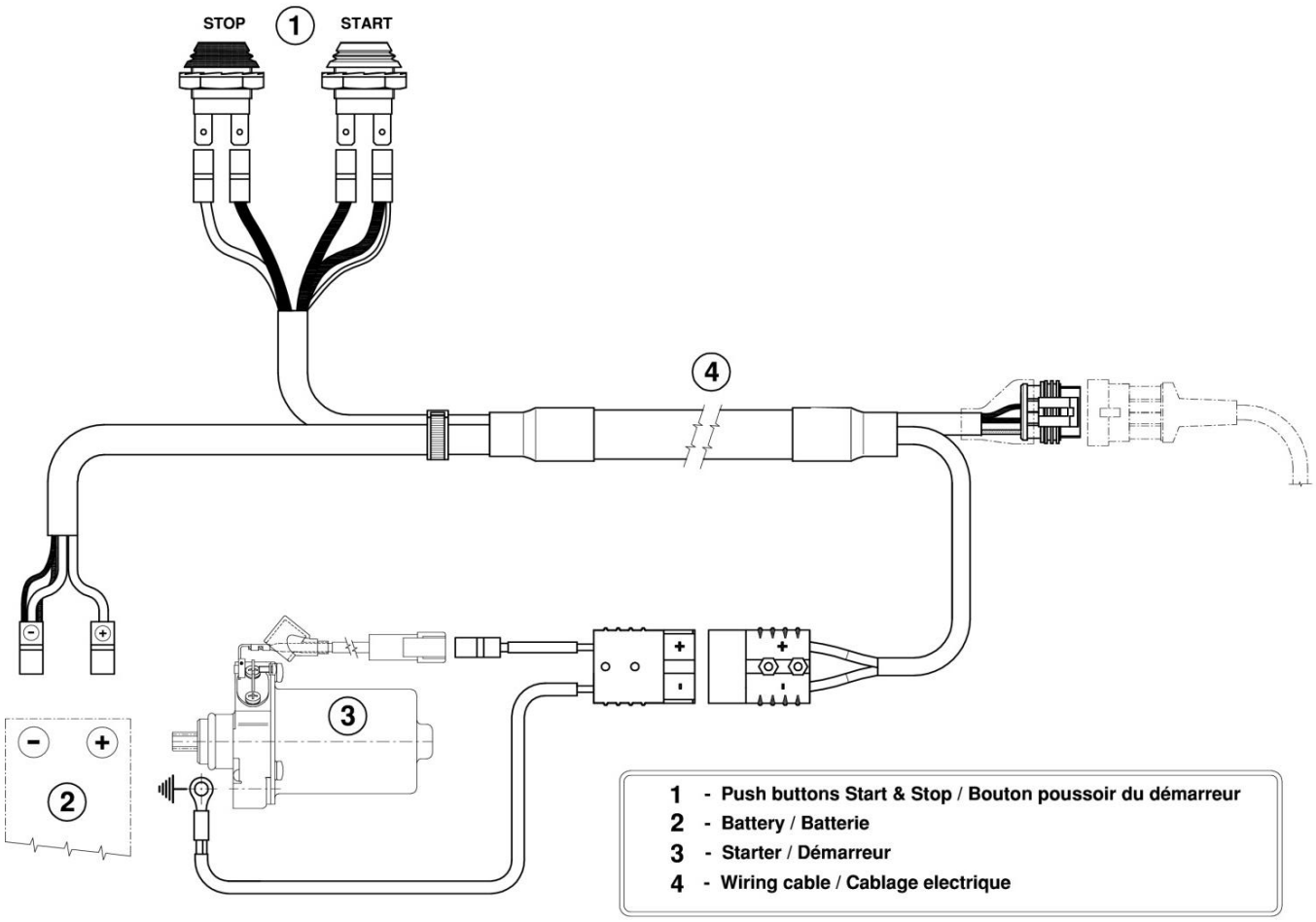
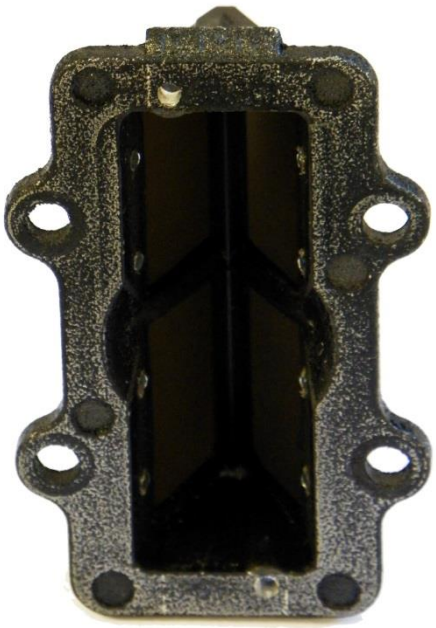
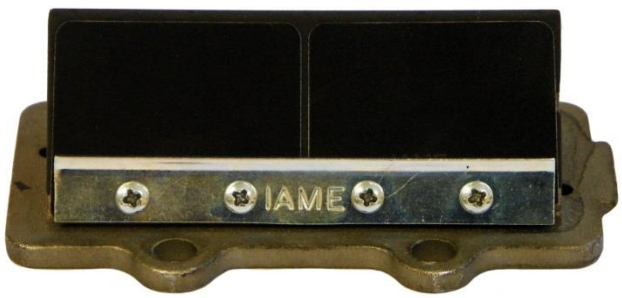
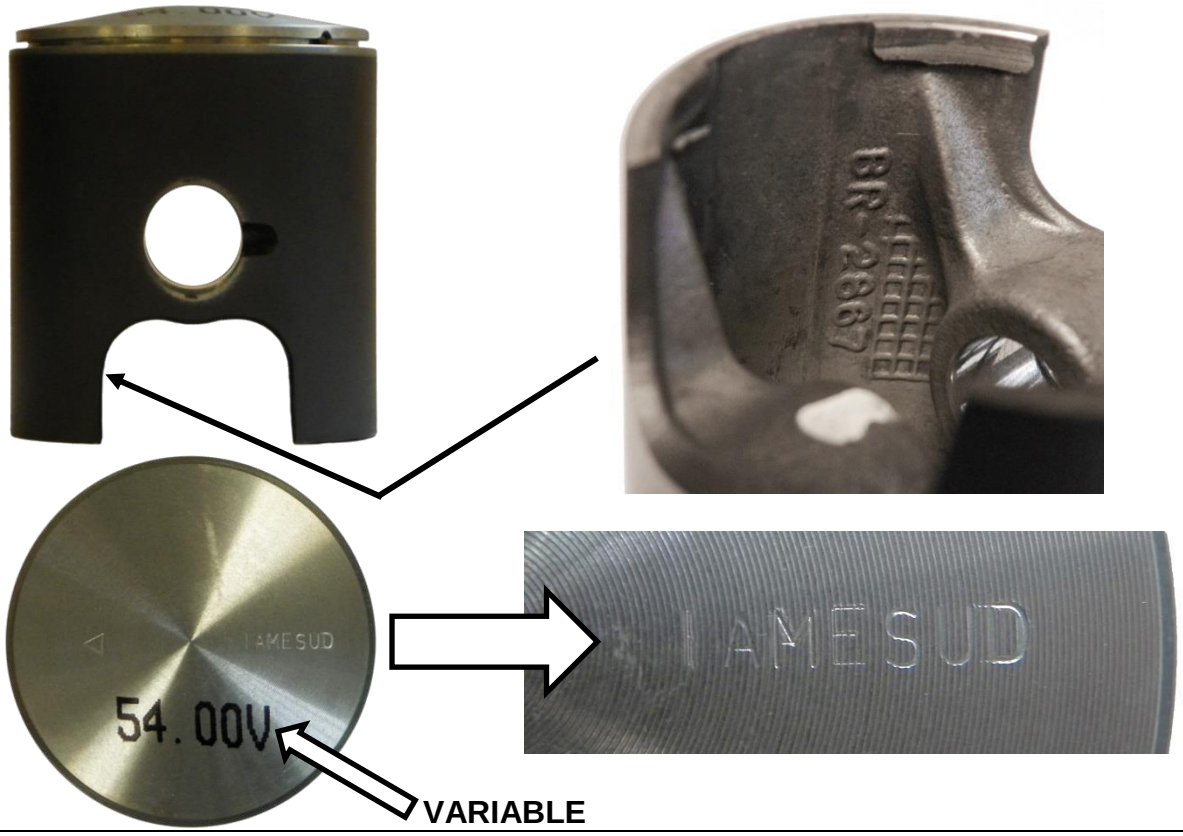


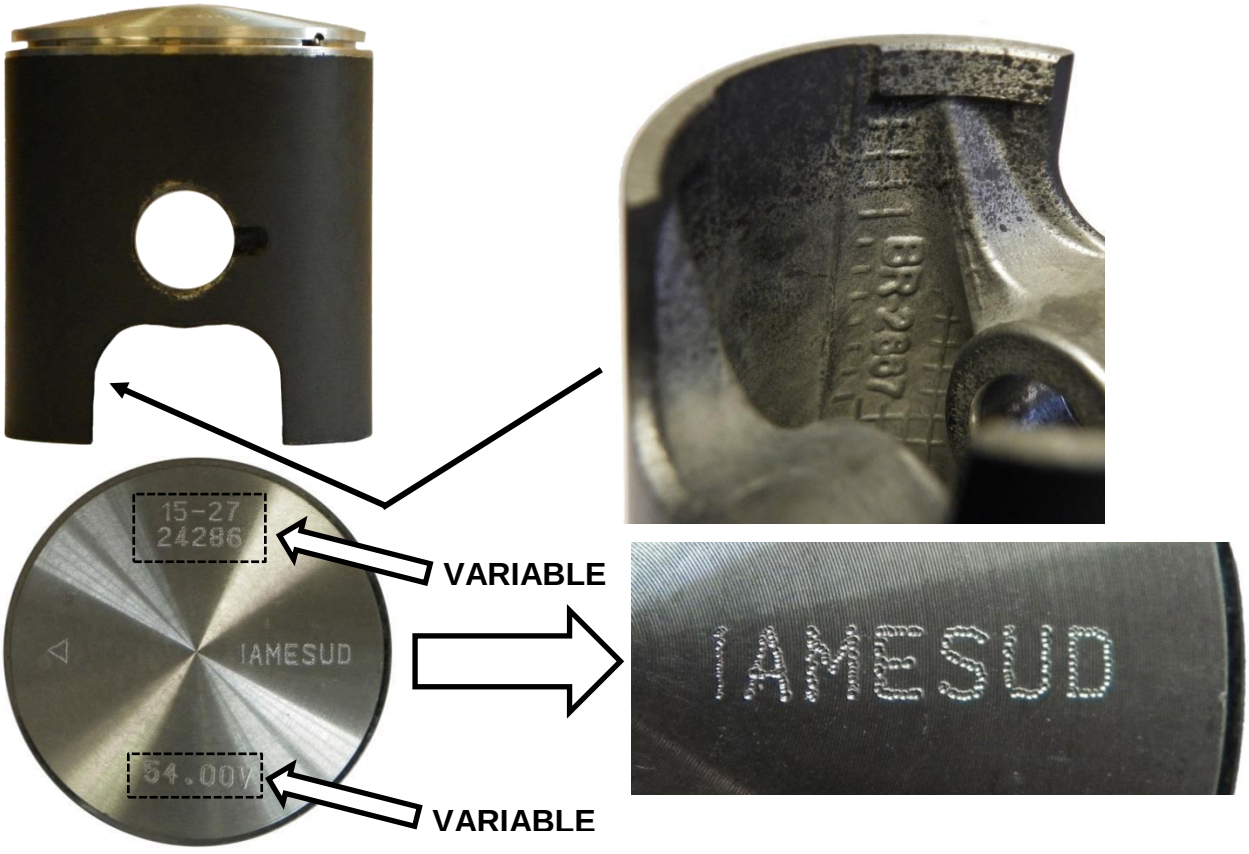
PHOTO IDENTIFICATION REED GROUP
*PHOTO IDENTIFICATION PYRAMIDE DE CLAPETS*

| ACTUAL VERSION<br>*COURANT VERSION* | ALTERNATIVE VERSION<br>*VERSION ALTERNATIVE* |
|---|---|
|  <br>  <br>  |  <br>  <br>  |

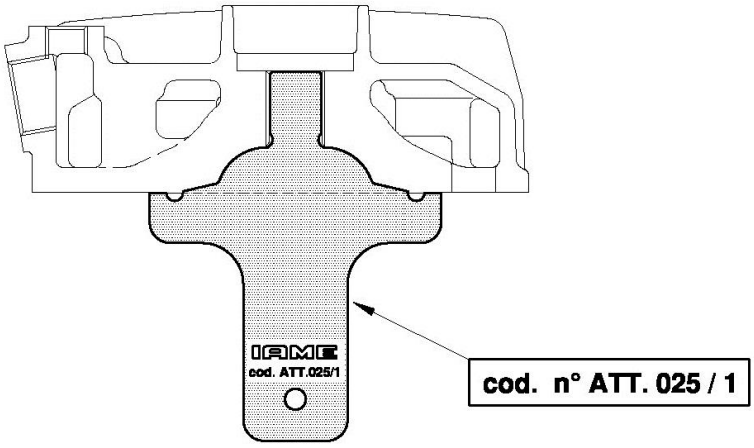
ACTUAL PISTON
*PISTON COURANT*



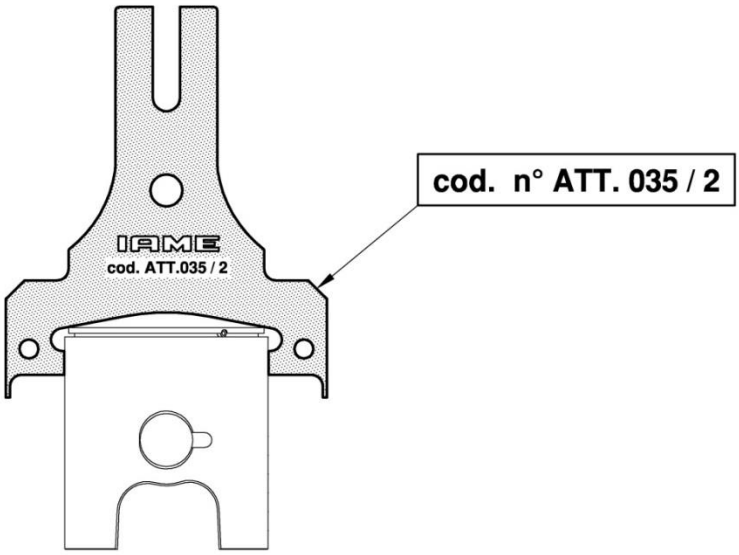

ALTERNATIVE PISTON
*PISTON ALTERNATIVE*



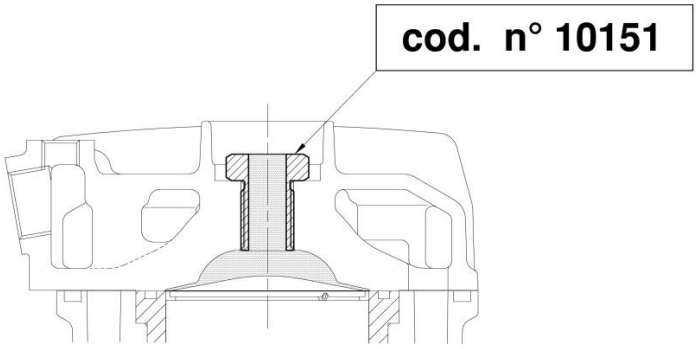
## CHECKING THE SHAPE OF THE COMBUSTION CHAMBER
*CONTRÔLE DE LA FORME DE LA CHAMBRE DE COMBUSTION*




## CONTROL OF THE PISTON DOME
*CONTRÔLE DU DÔME DE PISTON*

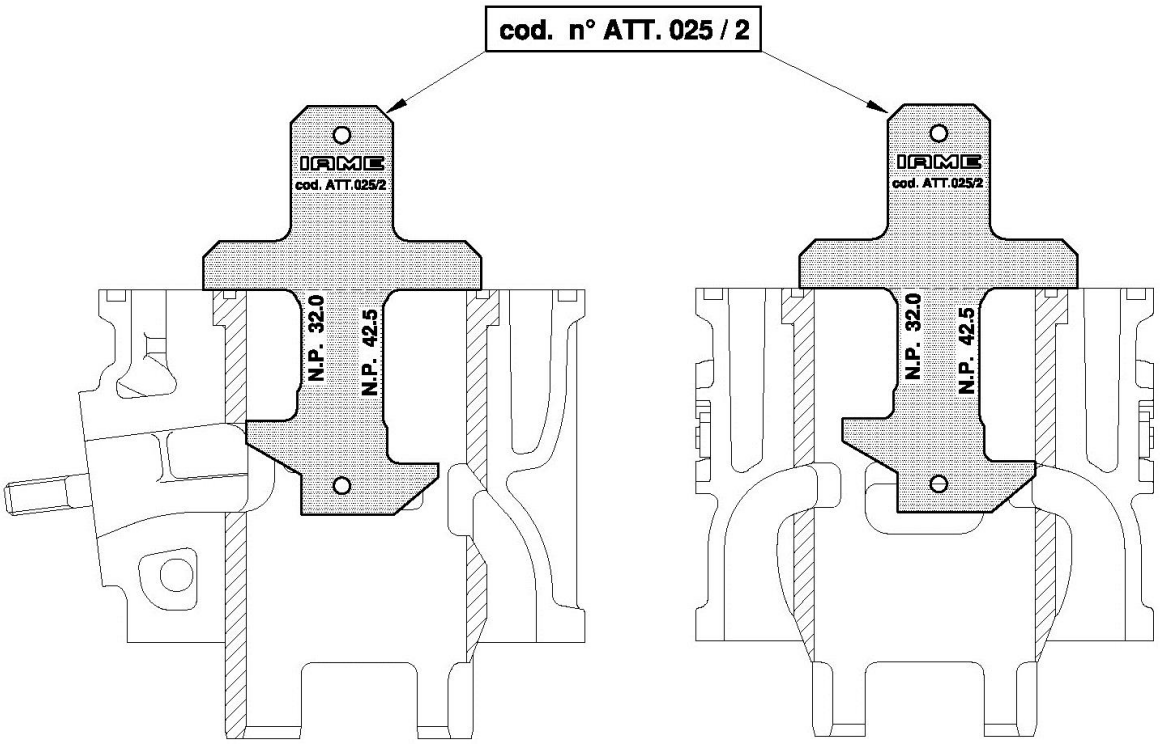



## CONTROL OF THE VOLUME OF THE COMBUSTION CHAMBER
*CONTRÔLE DU VOLUME DE LA CHAMBRE DE COMBUSTION*

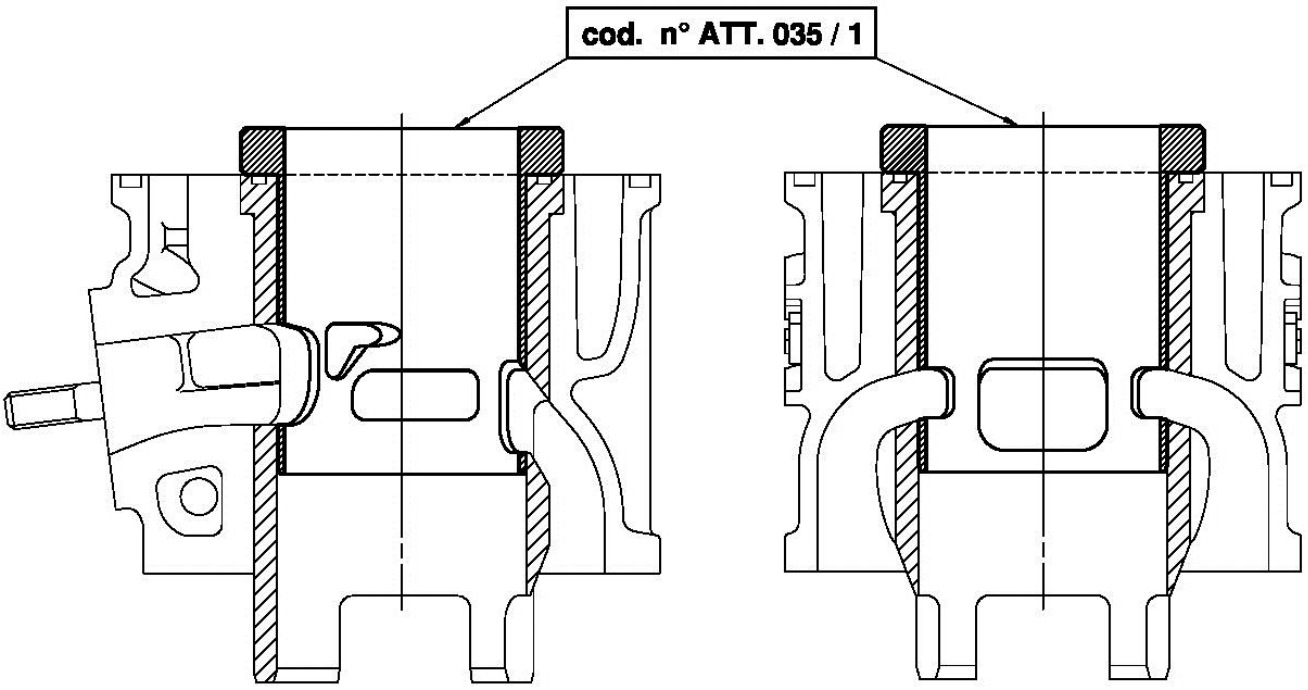


## **CYLINDER CHECK -** ***CONTRÔLE DU CYLINDRE***

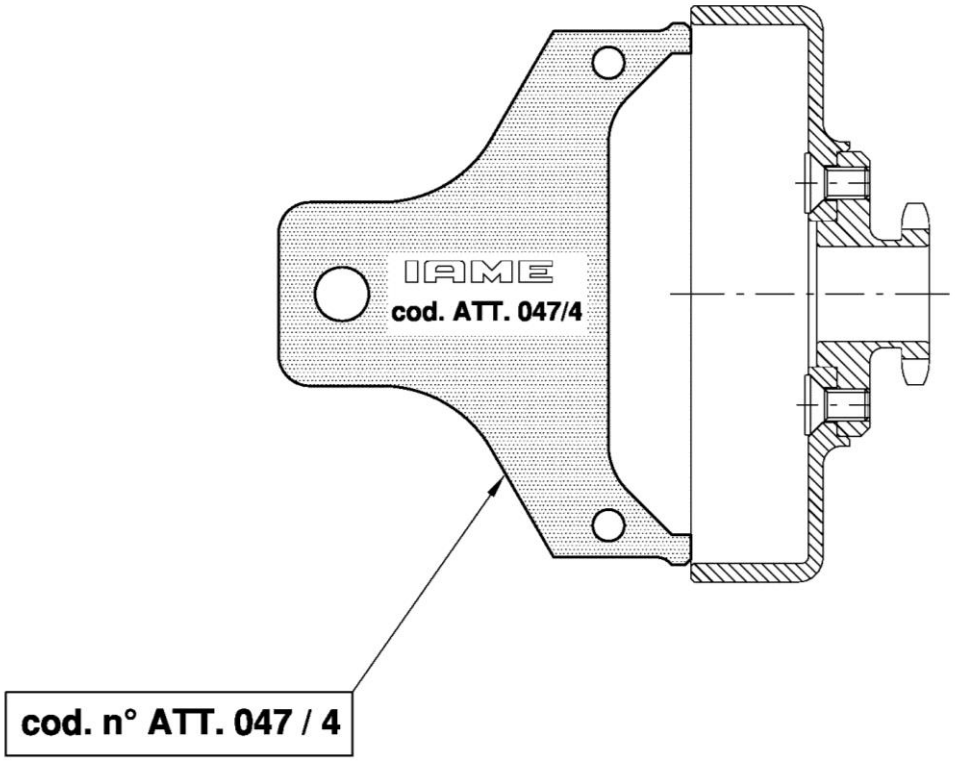
CHECK OF EXHAUST DUCT AND LATERAL TRANSFERS
*CONTRÔLE DE LA LUMIÈRE D'ÉCHAPPEMENT ET DES TRANSFERTS LATÉRAUX*




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

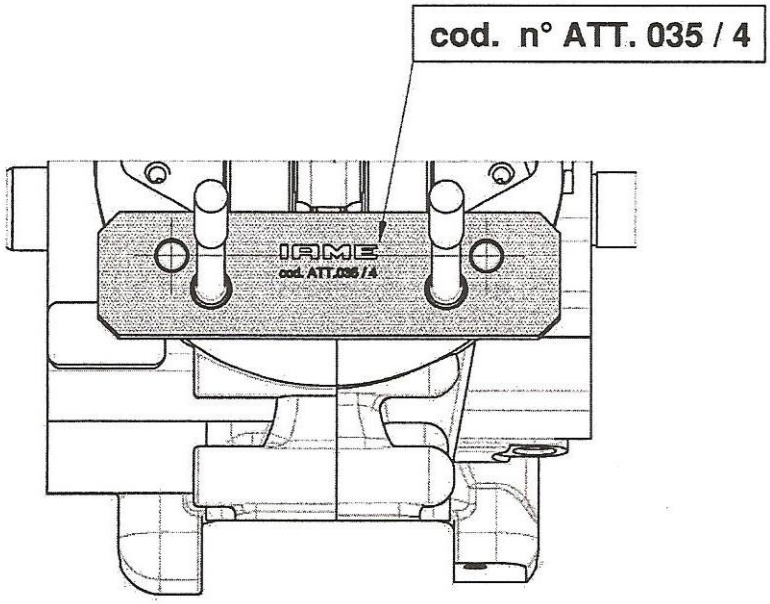


CLUTCH DRUM CHECK TOOL
*CONTRÔLE DE LA CLOCHE D'EMBRAYAGE*

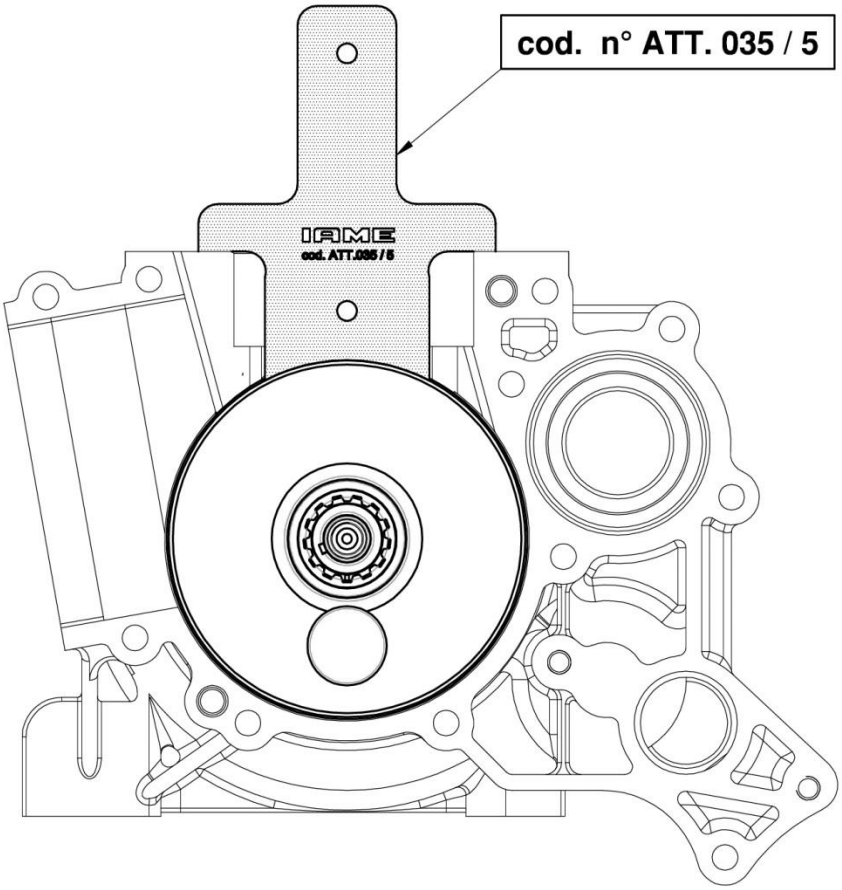



## CRANKCASE CHECK TOOLS - CONTRÔLE DU CARTER

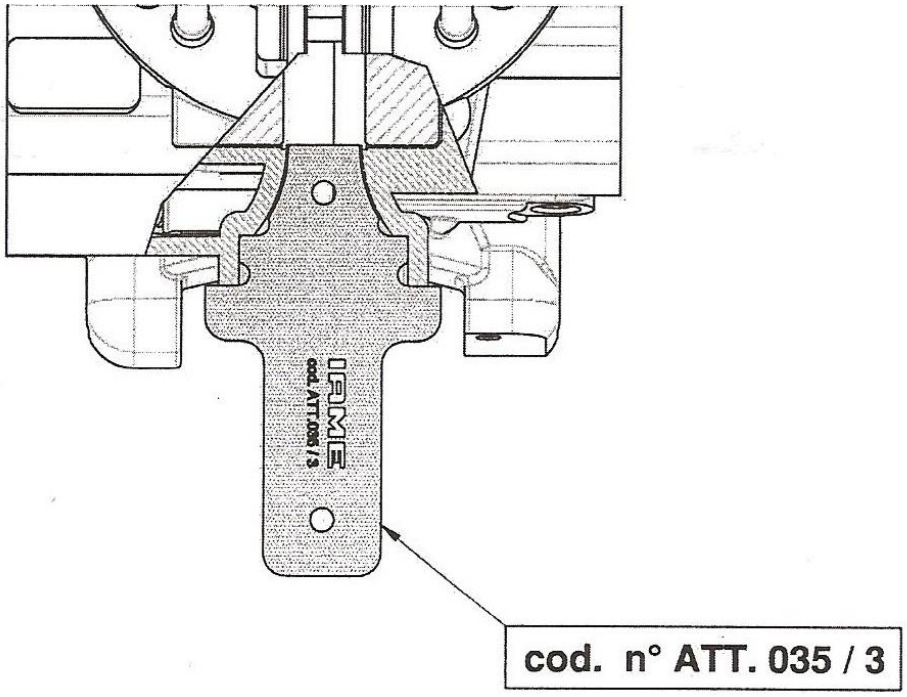
CHECKING THE DISTANCE BETWEEN THE CILYNDER PINS
*CONTRÔLE DE L'ENTRAXE DES PINNULES D'INDEXATION DU CYLINDRE*



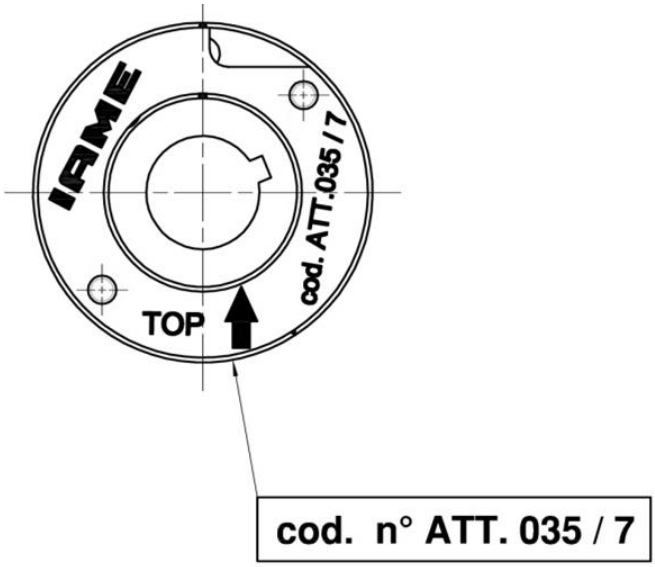
## CONTROL OF THE HEIGHT OF THE JOINT PLANE
*CONTRÔLE DE LA HAUTEUR DU PLAN DE JOINT*




## CHECKING OF THE REEDS VALVE SEAL PLANE
*CONTRÔLE DU PLAN DE JOINT DE LOGEMENT DE BOITE À CLAPETS*



CONTROL OF THE POSITION OF SELETTRA DIGITAL "S" PHASE MARKING
*CONTROLE DU POSITION REGULA DU MARQUAGE DU PHASE SELETTRA DIGITAL “S”*




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