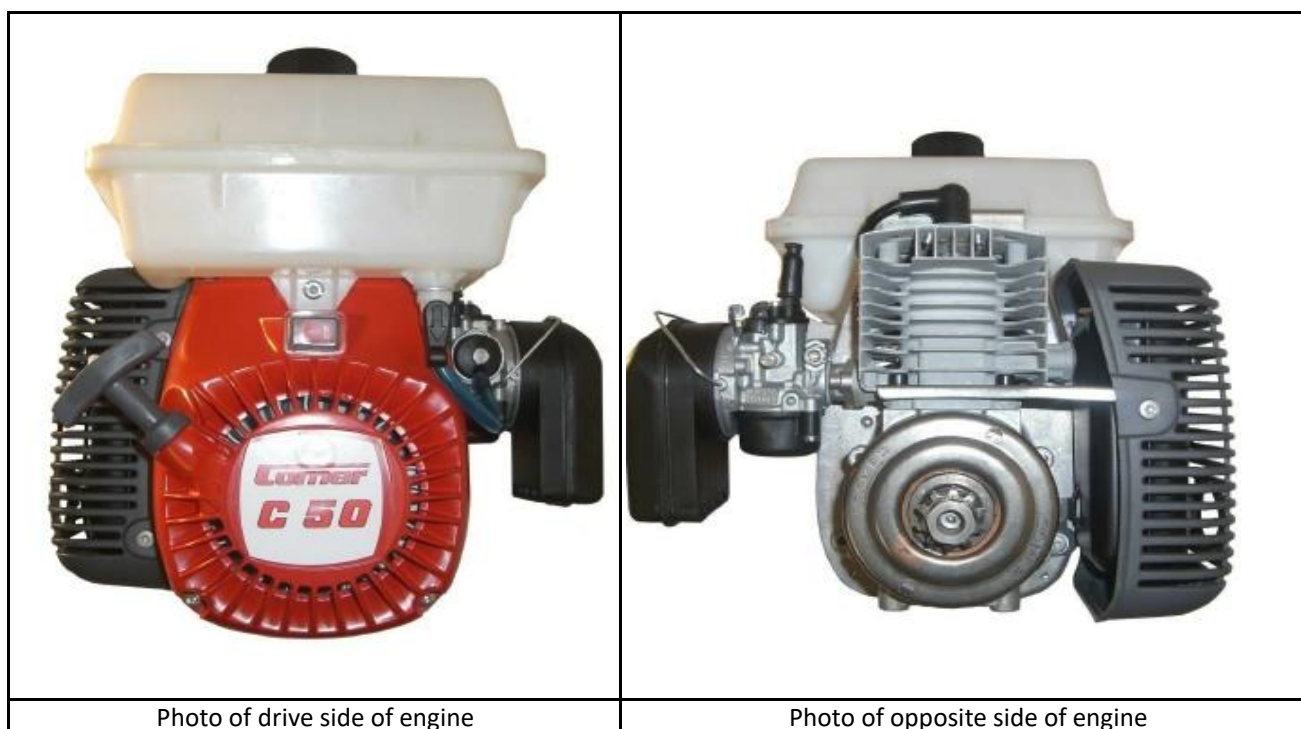



MSA COMER C50 TECHNICAL REGULATIONS 2018 VERSION 1

<i>Category</i>	Cadet
<i>Manufacturer</i>	Comer Spa
<i>Model</i>	C50
<i>Valid from</i>	01 January 2018
<i>Number of pages</i>	8

This Homologation Form reproduces descriptions, illustrations and dimensions of the engine at the moment of the MSA Homologation. This document may be supplemented by official amendment. This document must be read in conjunction with the appropriate Class Regulations.



SIGNATURE AND STAMP OF MSA

	<p>Date: 19 January 2018</p> <p>Signed by:</p> <p>Position:</p>
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Genuine Comer components only that are specifically designed and supplied for the Comer C50 engine are legal, unless otherwise specified. ANYTHING WHICH IS NOT EXPRESSLY ALLOWED IN THE TECHNICAL REGULATIONS IS FORBIDDEN.



TECHNICAL FICHE

Manufacturer: COMER SpA

Engine Type: C50



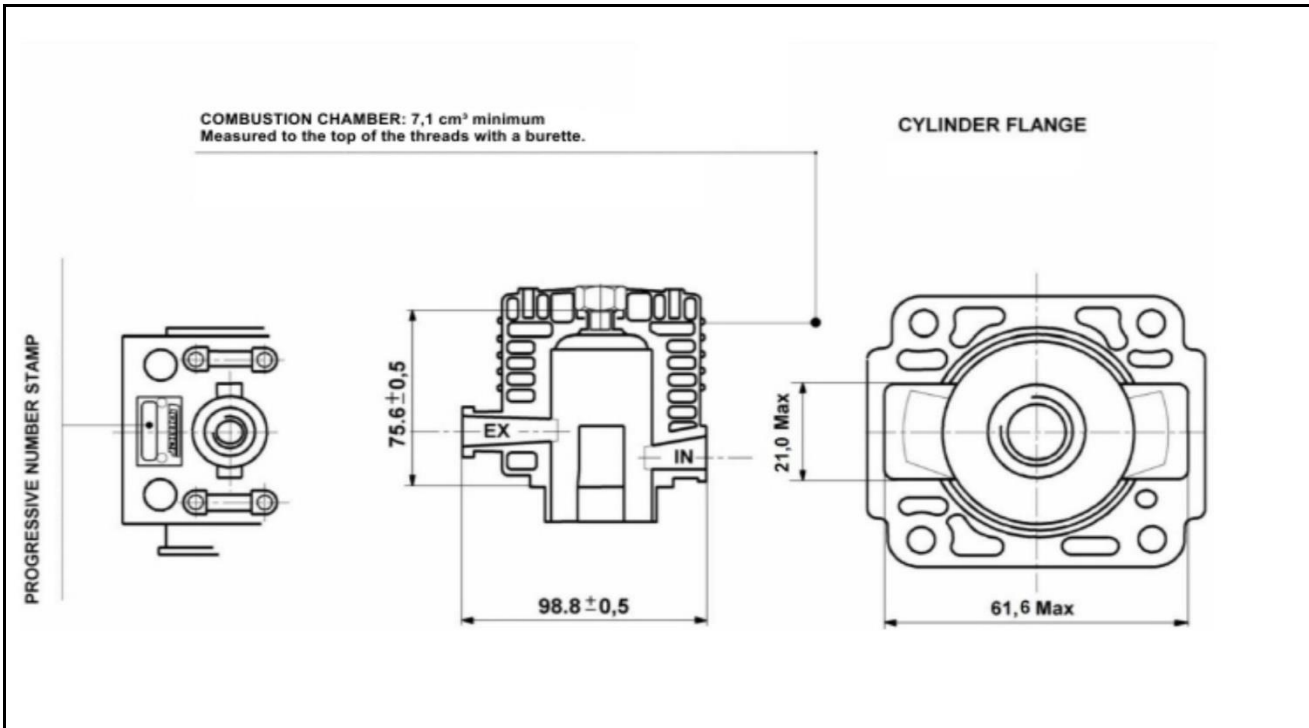


TECHNICAL INFORMATION

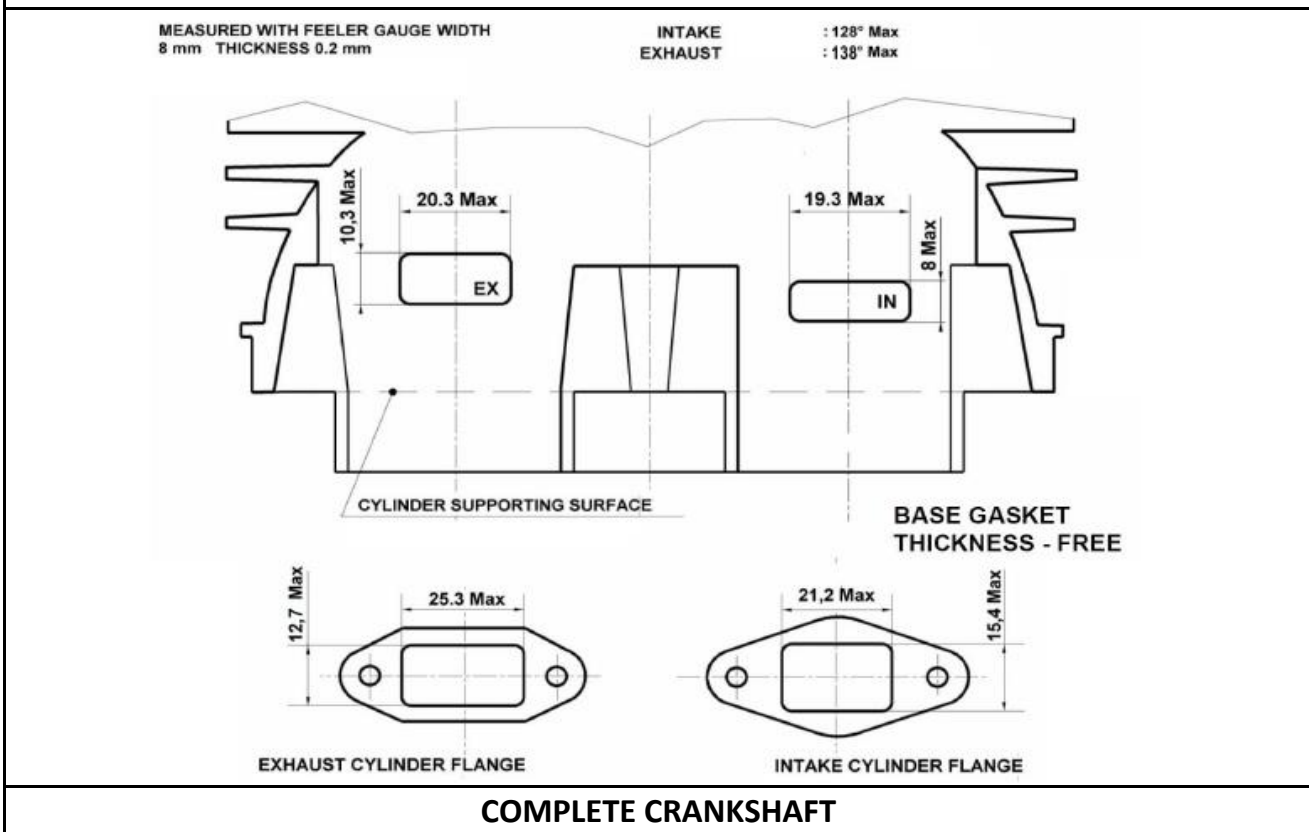
Bore	40 mm
Stroke	38 mm
Displacement	48 cc
Fuel / Oil	20:1 (95 Octane mixed with XPS Oil)
Ignition	Electronic
Clutch	Centrifugal 3 pieces
Front Sprocket	10 Z
Rear Sprocket	76 Z
Carburettor	DELL'ORTO SHA - 14-12L
Cylinder	Alluminium / Nicasil or chromed - Replating forbidden
Spark Plug	CHAMPION RCJ7Y or NGK BPMR7A or BOSCH WS5F

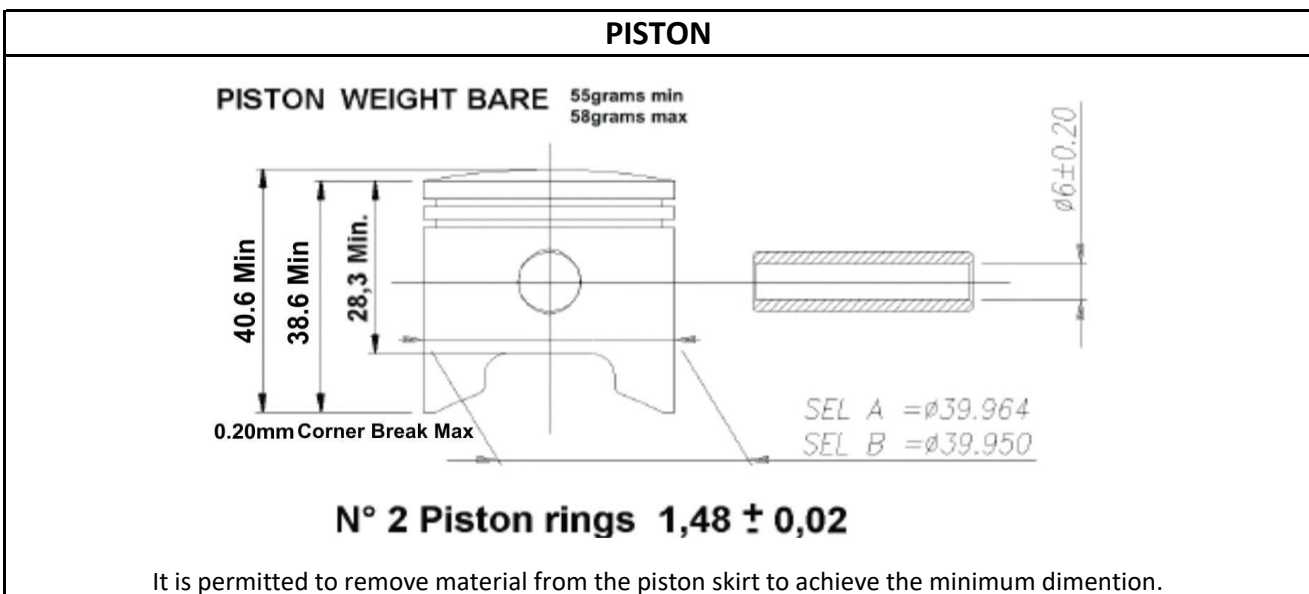
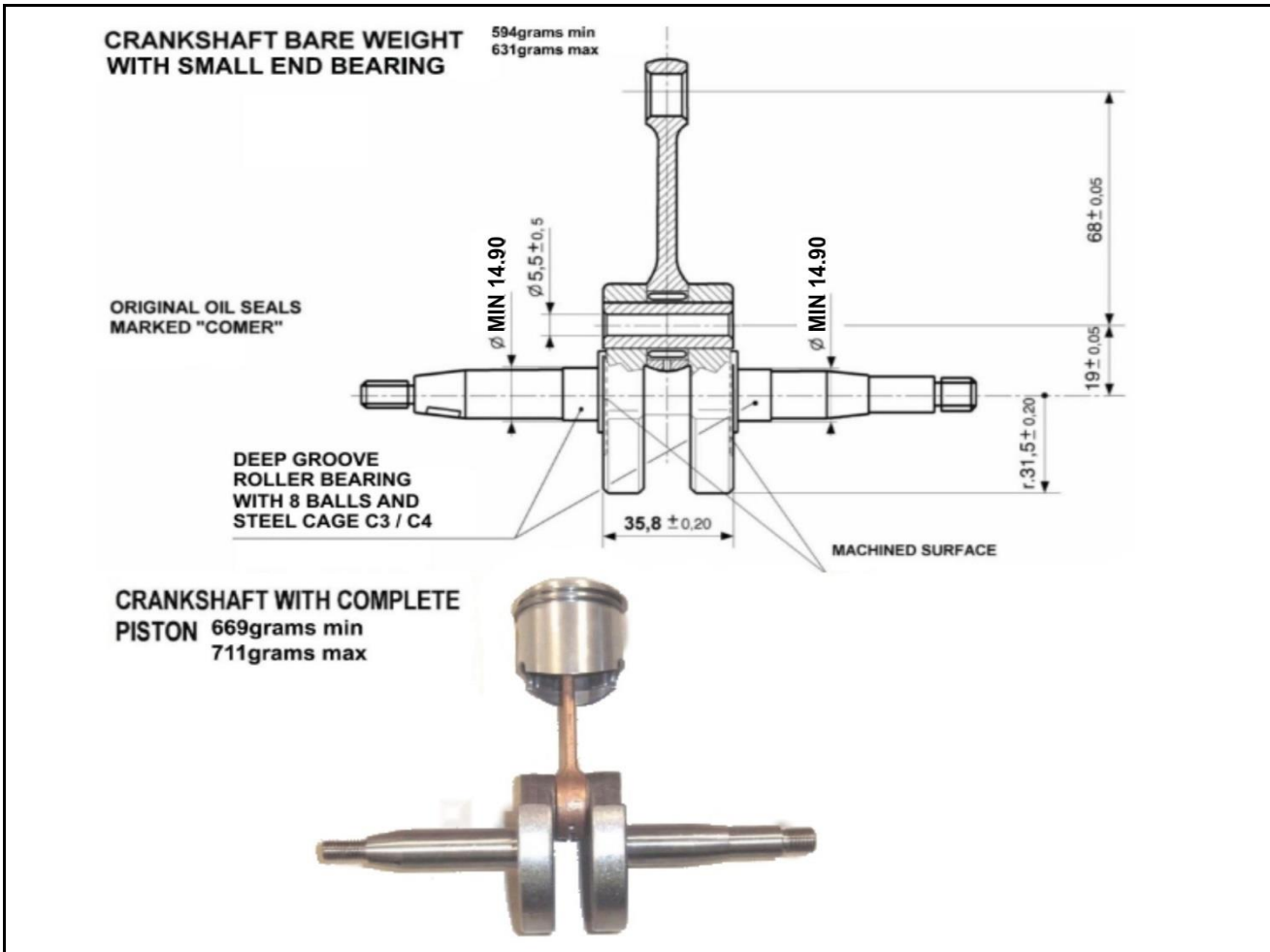
Locking devices and fixtures may be replaced with non original parts. Helicoils may be used.

CYLINDER


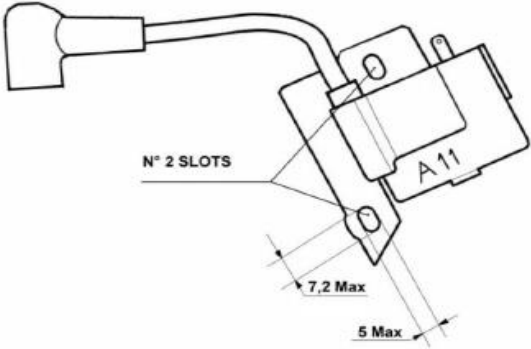
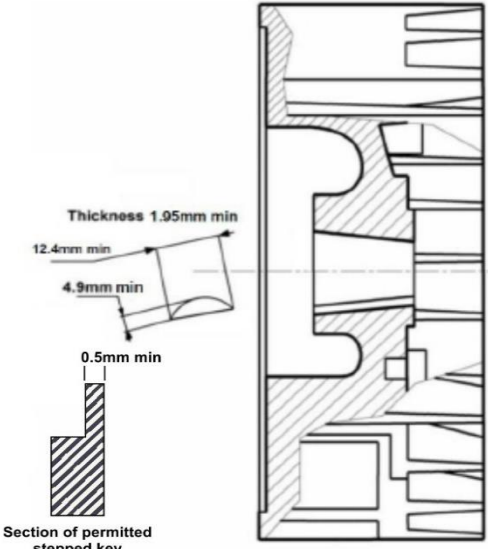


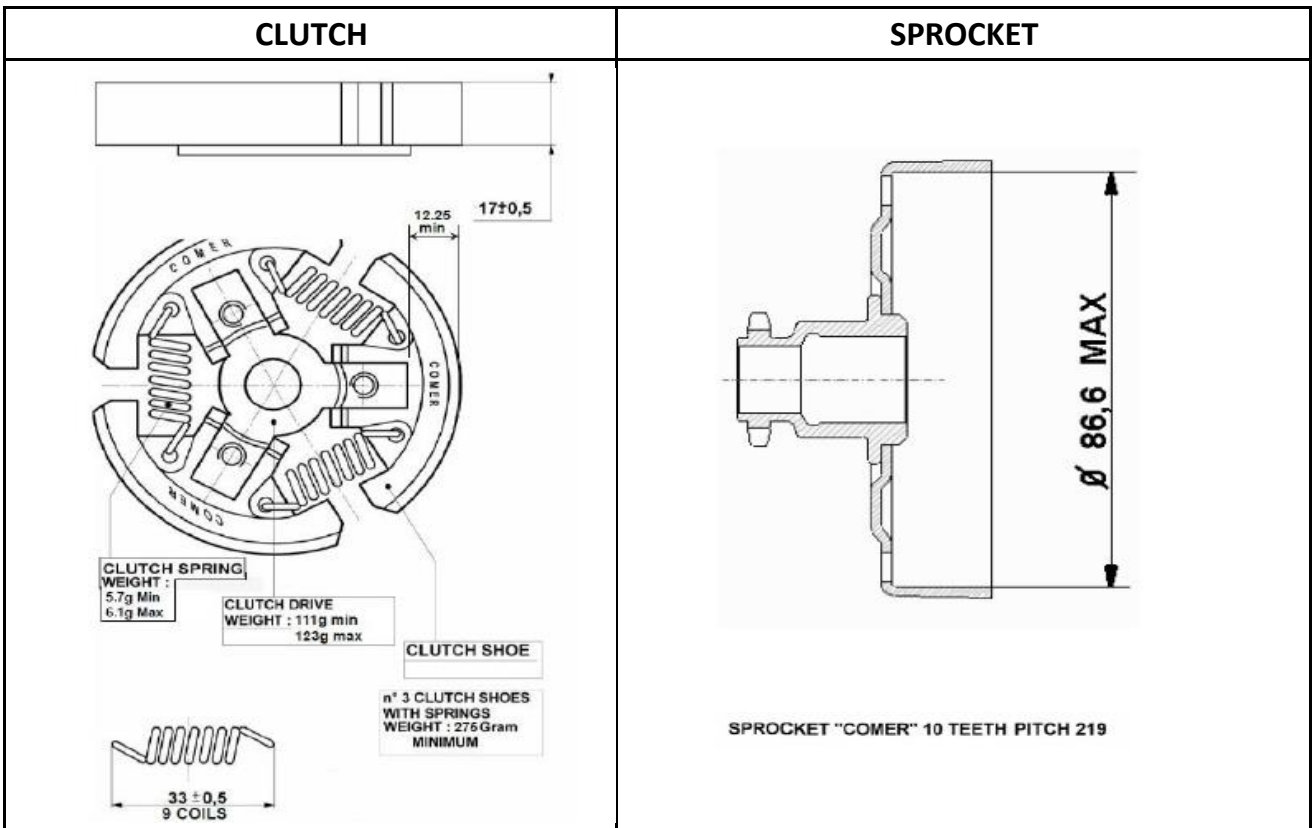
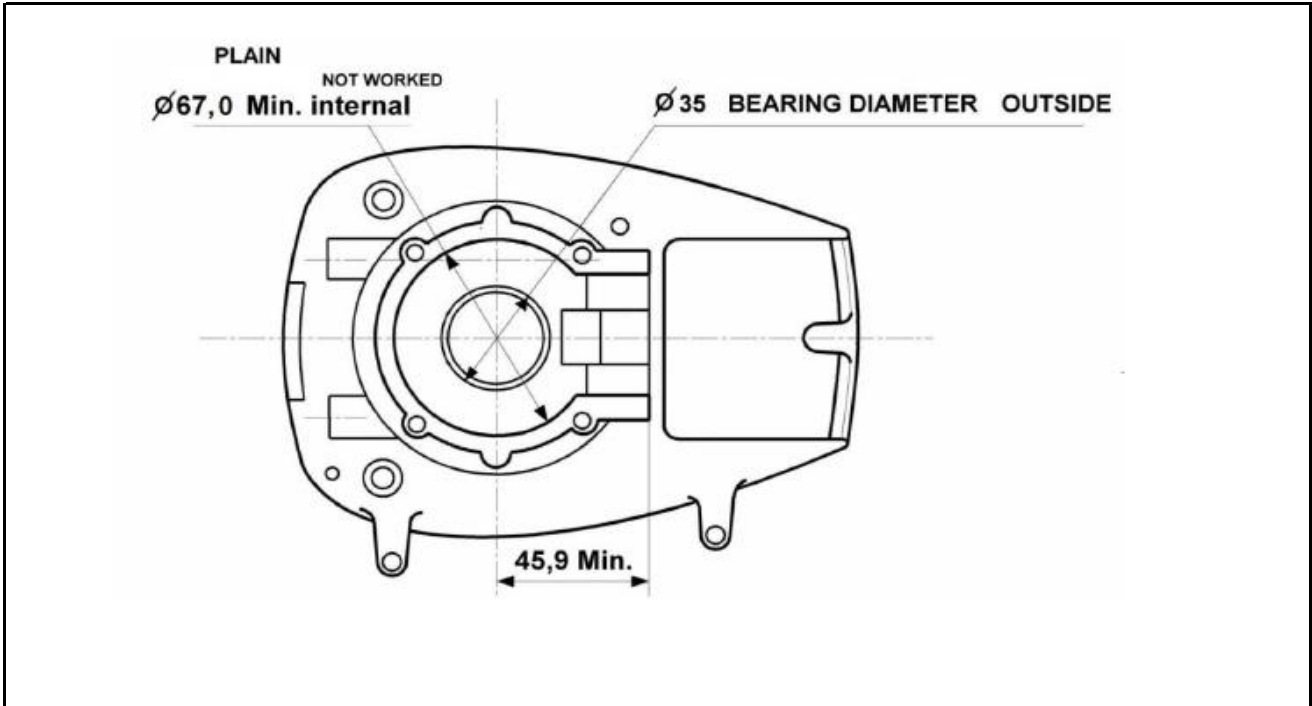
**CYLINDER DIAGRAM - Port sizes and timing using "as supplied" components
NO GRINDING ALLOWED**





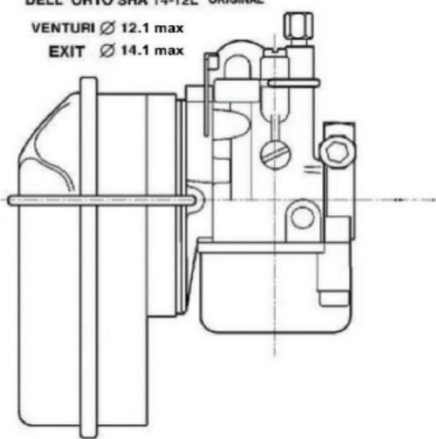
IGNITION	
FLYWHEEL	COIL
FJ MODEL	FJ MODEL A11 - Code FJ A11 20-07

	 <p style="text-align: center;">SPARE PART CODE: C050-452-02</p>
Code FJ 20-07	IGNITION TIMING
 <p style="text-align: center;">Weight= 378 min without key 402 max</p>	<p>It is permitted to modify the original woodruff key by removing up to 1.5mm of the thickness of the section that protrudes from the crankshaft. This allows the flywheel to be installed in a position advanced from the original position (i.e. rotated clockwise seen from the fin side relative to the crankshaft).</p> <p>It is recommended that the timing be set at 3.2mm btdc using the leading edge of the trailing magnet (second magnet) lined up with the left hand side of the long lamination leg as reference.</p> <p>The maximum advance allowed is 3.8mm btdc with no tolerance.</p> <p>It is recommended that an appropriate "loctite" is used on the tapered surfaces and that the nut is torqued to 25Nm.</p>
SPARE PART CODE: C050-453-02	
CRANKCASE	



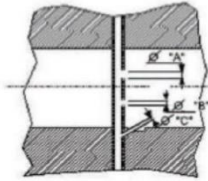
CARBURETTOR

DELL' ORTO SHA 14-12L ORIGINAL
 VENTURI \varnothing 12.1 max
 EXIT \varnothing 14.1 max



Emulsion Tube ID 1.80 max
 Slide No:7 (6108)
 Float 3.5gr
 Needle Seat ID 1.5max
 Main Jet FREE

\varnothing "A" = 1,25 mm
 \varnothing "B" = 0,80 mm
 \varnothing "C" = 0,80 mm



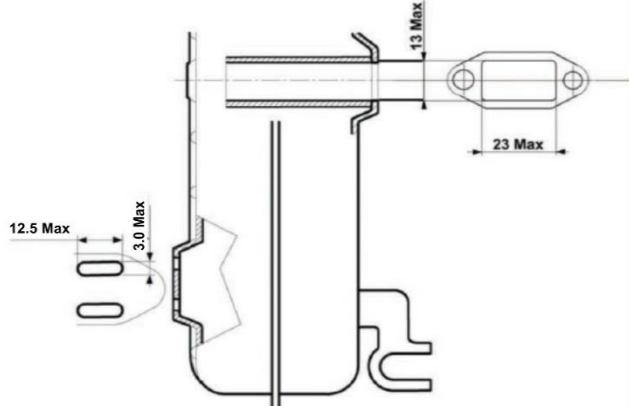
AIR BOX WITH 1 FILTER MIN
AIR BOX ORIENTATION FREE

VERIFY CARBURETTOR NOZZLE WITH NO GO GAUGE 0.01 MM LARGER THAN NOMINAL SIZE

NB! The original die cast inlet manifold is to be used and may not be machined. Additional brackets with the sole purpose of supporting the carburettor may be added.

MUFFLER

MEASUREMENTS RELATE TO INNER SECTION WHICH MUST BE PARALLEL.



PORT TIMINGS

Port timing measurements will be done with either a digital degree wheel or a graduated disc of minimum 280mm diameter and a pointer that is sharpened to a knife edge. To avoid arguments over parallax errors the pointer should be less than 3mm from face of the degree wheel where the reading is taken. The sharp point must clearly be on the line defining the maximum measurement. The measurement will be taken with all the slack in the system taken up i.e. the crankshaft will be rotated until it firmly stops against the feeler gauge.

The feeler gauge will be 0.2mm thick and 8.0mm wide. The feeler gauge will follow the angle on top of the piston for exhaust port measurement and be held flat on the bottom of the inlet port.

Inlet Port duration maximum 128 degrees no tolerance
 Exhaust Port duration maximum 138 degrees no tolerance

GENERAL

Fuel system: It is permitted to remove the sieve in the fuel tank and enlarge the hole. An inline fuel filter is permitted.