

TECHNICAL REGULATIONS

BABY

EAT

50CC / 52 CC



SKUSA MEXICO

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1. BABY CATEGORY

- 1.1. BABY COMER 50CC/52CC IAME M1 Category reserved for pilots from 4 to 7 years old, in the case of pilots who do not comply with the above, they must have written authorization from the steering committee of the SKUSA MÉXICO Championship.

2. OFFICIAL WEIGHTS

- 2.1. BABY 70 Kgs COMER 50CC / 52CC IAME M1

3. COMER 50CC/52CC ENGINE

- 3.1. ENGINE: OEM stock only without any modification in any of its parts. This category is OEM stock in all its parts.

- 3.2. SPARK PLUG: NGK BPMR6ANGKR only.

- 3.3. CYLINDER/ENGINE HEAD: OEM COMER 50CC/52CC without any modifications, rebuilt and re-nicasil cylinders are prohibited, as well as porting, joning, roughing, scoring at the base of the cylinder or adding material to the cylinder's internal parts. The cubic capacity of the combustion chamber cannot be less than 6.7cc. Taking as measurements the illustrations in the COMER 50cc specifications annex.

The cubic capacity of the combustion chamber cannot be less than 6.7cc. Taking as measurements the illustrations in the COMER 50cc specifications annex.

- 3.4. RESTRICTOR, INTAKE AND EXHAUST:

ADMISSION RESTRICTOR: The use of an admission restrictor is mandatory with the following measurements inside; 19.9390 mm long by 13.2538 mm high by 1,900 mm thickness (with a tolerance of 0.254 mm) with black anodizing the loss of anodizing of its interior will be grounds for sanction as stipulated in the general regulations of the SKUSA MEXICO Championship.

EXHAUST RESTRICTOR: The use of the exhaust restrictor is mandatory with the following measurements inside; 25,400 mm long X 12,700 mm high X 1,900 mm thick (with a tolerance of +.254 mm) with black anodizing the loss of the anodizing inside will be reason for sanction as stipulated in the Technical or General Regulations of said category.

- 3.5. PISTON: OEM for COMER 50cc stock only, no treatment or modification is allowed, and must have a height taken from the piston skirt to

the top of the 40.6mm piston. Taking as measurements the illustrations in the COMER 50CC/52CC specifications annex.

3.6. RING: OEM for COMER 50CC/52CC stock only, the use of 2 rings is mandatory, no treatment or modification is allowed. It must have a thickness of 1.47mm +/- 0.02mm. Taking as measurements the illustrations in the COMER 50cc specifications annex.

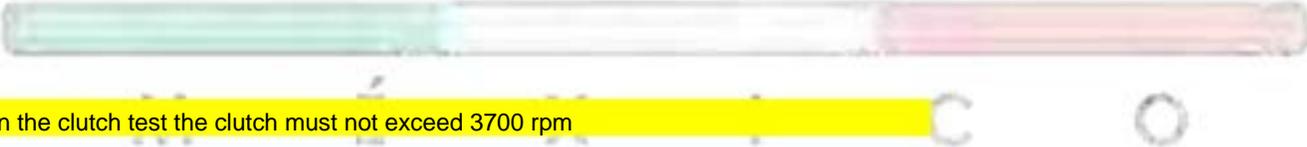
3.7. PIN: OEM for COMER 50CC/52CC stock, no modification is allowed in weight, size and shape. With a length of 32.8mm +/- 0.2mm and an outer diameter of 10mm +/- 0.2mm and inner diameter of 6mm +/- 0.5mm. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.8. CYLINDER BASE PACKING: Free

3.9. CRANKSHAFT AND CONNECTING ROD: OEM for COMER 50CC/52CC stock without any modification with a total weight with piston, pin, clips and rings of 670grs minimum. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.10. BEARINGS, CRANKSHAFT SEALS: Original OEM COMER 50CC/CC and can be replaced by their equivalent from a different brand or supplier (the use of ceramic bearings or exotic materials is not permitted).

3.11. CLUTCH. – Original OEM COMER 50CC/52CC Without any type of modification or addition of material. The clutch pads body and the clutch bell must not contain excessive grease or oil and must maintain their original position. Any treatment on the clutch pads is prohibited. Re-pasting of the clutch pads is not permitted.



In the clutch test the clutch must not exceed 3700 rpm

The minimum weight of the clutch hub must be 113 grams, with a height of 9.7mm +/- 0.1mm and a minimum width of 49.5mm, without any machining or modification.

The inner diameter of the clutch bell is 86.6mm maximum.

The minimum weight of the springs is 5.6 grams and the maximum weight is 5.9 grams, with a thickness of 2.0mm +/- 0.05mm, with 8.5 turns in the spring.

Taking as measurements the illustrations in the COMER 50CC/52CC specifications annex.

3.12. ENGINE COVERS (CASES): ENGINE COVERS (CASES): Original OEM COMER 50CC/52CC made of aluminum material without any type of modification or machining inside, with a minimum internal diameter of 67.2mm, and a minimum height taking the bearing as the center of 45.9mm, packing between the CASES is NOT allowed. Taking as measurements the illustrations in the COMER 50CC/52CC specifications annex.

3.13. CARBURETOR: Original OEM COMER 50cc Dellorto SHA 14-12L original, without any modification, with the upper hole of the emulsion tube a maximum diameter of A=1.25mm.

The lower holes of the emulsion tube must have a maximum diameter of B=0.80mm. Taking as measurements the illustrations in the COMER 50CC/52CC specifications annex

The main nozzle is free. The venturi will be measured with a tool or it should not enter Measure 0.476" "No-Go"

3.14. GASOLINE AND OIL: Premium, with free oil mix. (Forbidden e.g. oxygenates, alcohols of any kind or octane boosters etc.). It will be checked with the digatron. The maximum measurement will be established in each event by the technical director. The oil for gasoline mix provided by the SKUSA MEXICO Championship will be mandatory to use.

3.15. AIR FILTER: The use of a cone or cylindrical type air filter will be mandatory for this category. It is NOT permitted to burn or remove the textile and/or metal filter cloth.

3.16. STATOR: Original OEM COMER 50CC/52CC. Without any modification or machined, with a maximum wedge opening of 2.39mm.

With a FJ2007 model steering wheel, without any type of modification or machining, with a minimum weight of 378grs, without nuts, washers, bolts or screws.

3.17. COIL: Original OEM COMER 50CC/52CC. Original only without any type of modification or machining, black color, with a diameter of the fixing screws of 5mm wide and 7mm long as maximum.

3.17.1 IGNITION TIME

- Remove the spark plug
- Remove the cover (ignition) -install the measuring instrument into the spark plug hole
- The measuring clock must be at zero (0)
- The zipper must be rotated counterclockwise until the first magnet is exposed to the left of the coil.
- Observe the edge of the coil. The edge on the left side (closest part to the center) lines up exactly with each other. The union of these two pieces will determine the timing for ignition.
- Rotate the rack again clockwise now to align it with the magnet on the left side of the mounting edge. The edge of the edge on both sides should read (RH) .050" to .060"

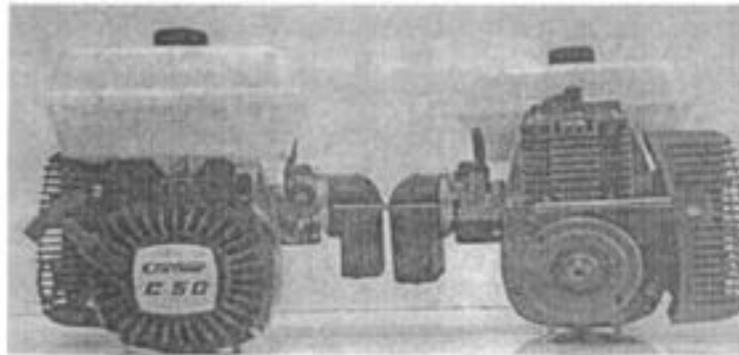
3.18 EXHAUST: Original OEM COMER 50CC/52CC, only the undrilled exhaust is allowed, without any type of modification, with a maximum inlet width of 25.7mm and a maximum length of 13.2mm, with an exhaust outlet diameter of 3mm maximum width by 12.5mm maximum length. Taking as measurements the illustrations in the COMER 50cc specifications annex. The measurement of the outlet diameter for the exhaust will be 0.110" x 0.475" measured with a "No-Go" tool.

3.18. FRONT AND REAR GEAR (Front pitch in CLUTCH): 10 teeth, (Rear pitch): 89 teeth, which may be original or aftermarket (non-original).

The schematic diagram of the COMER 50CC/52CC engine and its components is attached to these technical regulations of the BABY category for better identification and application of these regulations, forming part of these regulations **ANNEX A**.

MSA 50CC/52CC Comer specification Sheet - 158677/B & 158677/A

ENGINE TYPE EAT THAT



TECHNICAL CHARACTERISTICS

BORE	40MM
STROK E	38MM
DISPLACEMENT	48CC
FUEL	4%MIX
IGNITION	ELECTRONIC
SPARKPLUG SHORT THREAD CLUTCH CENTRIFUGAL	
3 PIECE	
PINION	10 TOOTH 219 PITCH
CARBURETOR	ORTO SHA-14-12L
GYL/NDER	ALUMINUM MINIKASIL
MANUFACTURER	COMERSPA
MODEL	C50

SKUSA

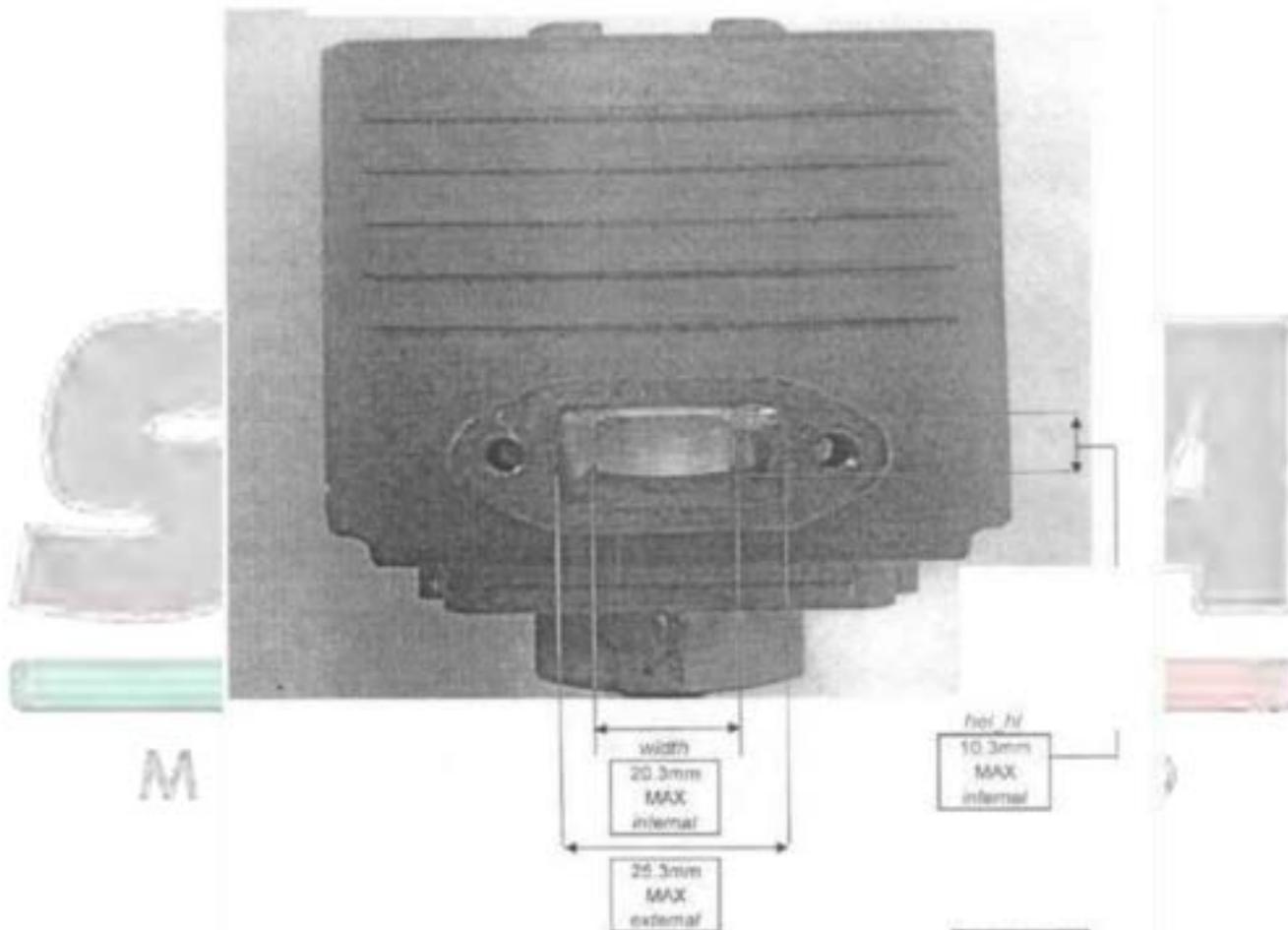


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ANNEX A

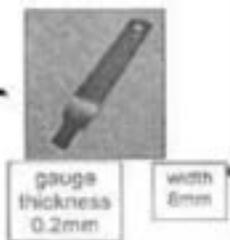
C linder - Exhaust Port



Port Durations

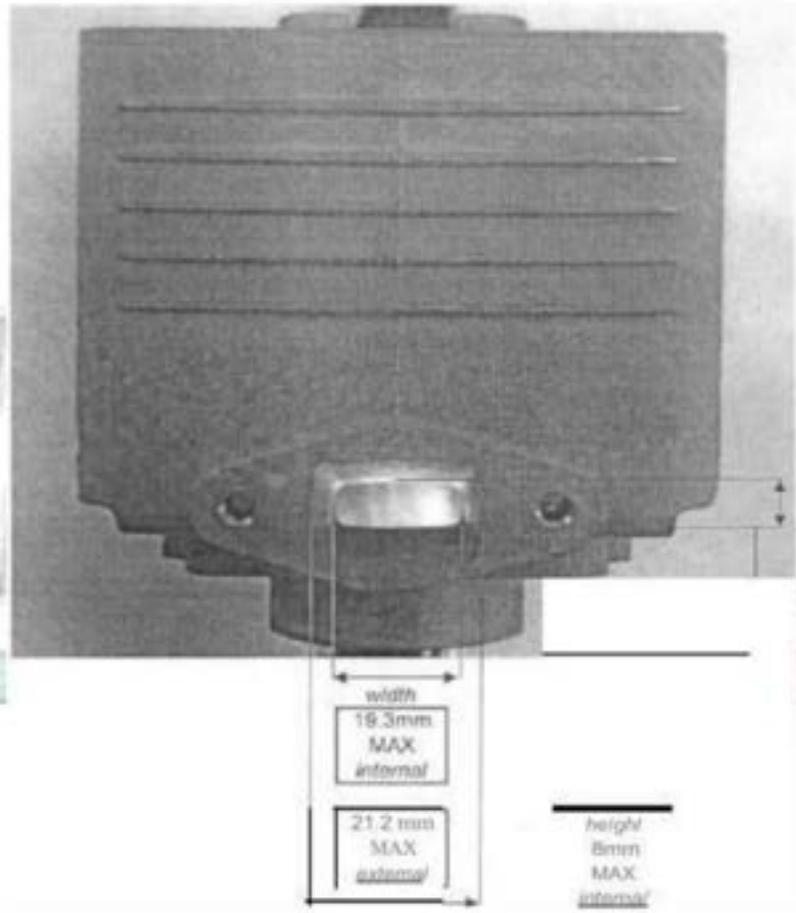
A 0.2mm thick feeler gauge that is 8mm wide must be used to measure port durations

Inlet Port	128 deg	Max
Exhaust Port	138 deg	Max



COMBUSTION CHAMBER VOLUME 6.7CC MINIMUM
measured on the vertical external spark plug thread.
A mixture of approximately 50/50 2-stroke oil/petrol will be used to check the combustion chamber volume

e linder - Inlet Port



Port Durations

A 0.2mm thick feeler gauge that is 8mm wide must be used to measure port durations

Inlet Port	128 deg	Max
Exhaust Port	138 deg	Max

RE-NICASIL OF CYLINDERS IS NOT PERMITTED

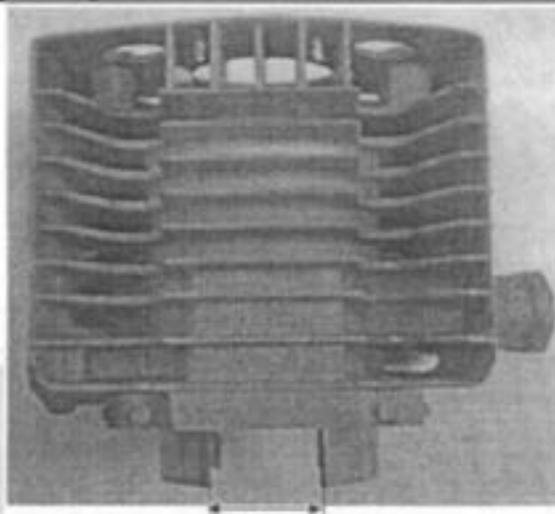
COMBUSTION CHAMBER VOLUME 6.7CC MINIMUM

measured on the vertical external spark plug thread

A mixture of approximately 50:50 2-stroke oil/petrol will be used to check the combustion chamber volume

Cylinder - Transfer Ports

no modification of any
ports permitted at all



21.2mm
MAX

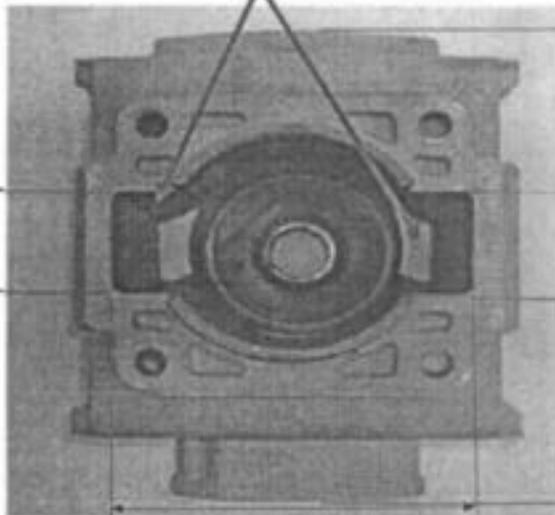
Outer part of transfer
Port at base of cylinder
20.7mm
MAX

Inner part of transfer
Port at base of cylinder
20.4mm
MAX

Removal or addition of material is
FORBIDDEN

M

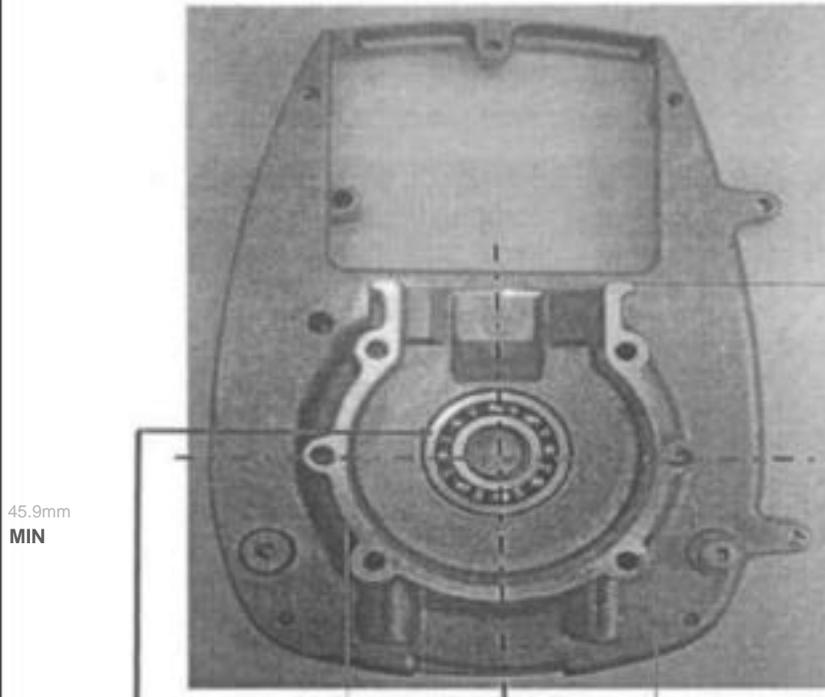
IT'S



97.4 mm
MIN

61.4mm
MAX

Crankshaft - Casin s



45.9mm
MIN

67.2 mm internal diameter

Remove l or addition of material is
forbicial

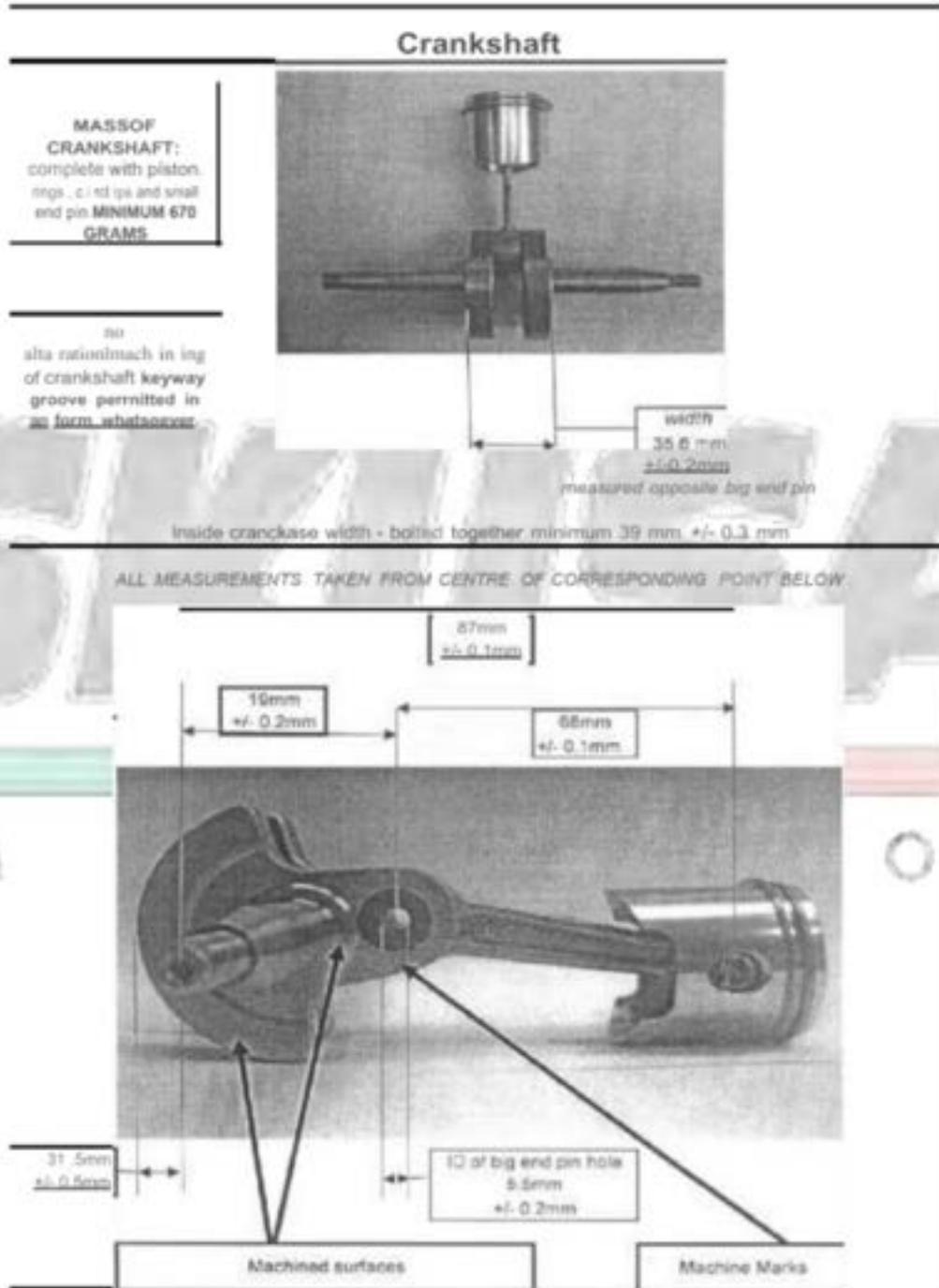
C3 or C4 8 ba ll steel cage bearing
only **Ceramic**: bearings are **NOT**
permitted

MIN

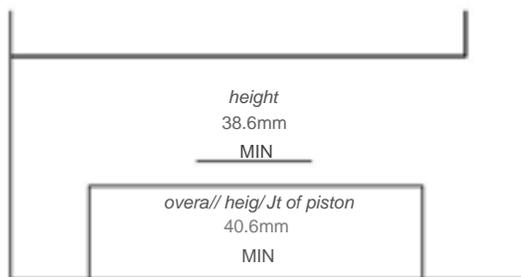
All alternative makes of oil seals and bearings the same type (single row deep metal cage) as original are
ermitted.

No crankcase gasket permitted . Inside crankcase width - bolted together minimum 39
mm +/- 0.3 mm

ANNEX A

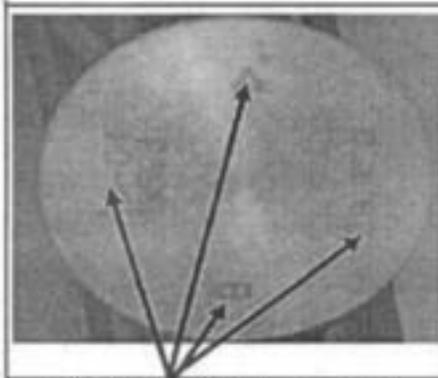


ANNEX A



ANNEX A

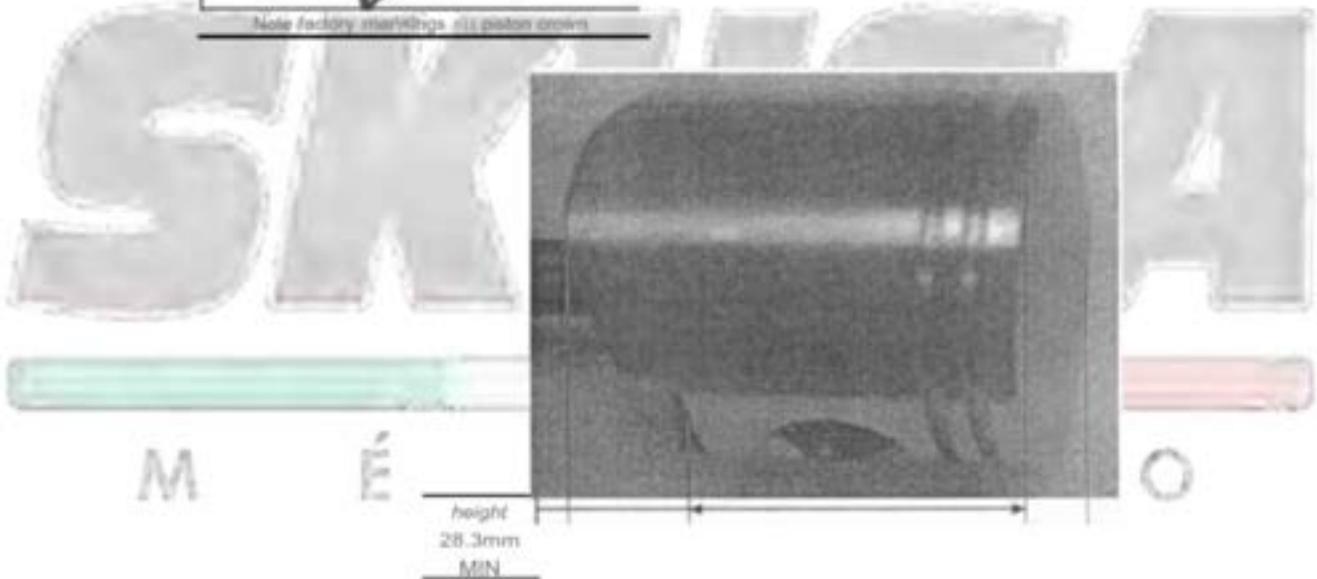
Piston



Note factory markings on piston crown

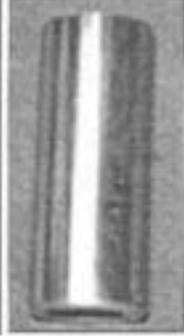
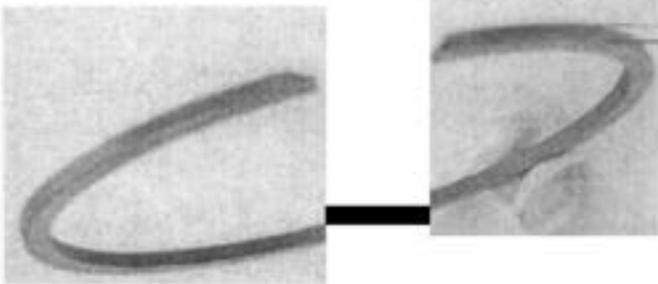


piston has 2 ring grooves



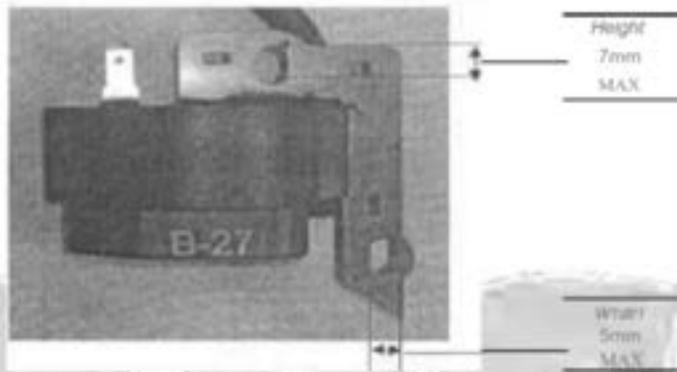
11 is only permissible to machine the bottom skirt of the piston to the minimum heights as stated above. No further machining or modification of the piston in any other area is permitted.

ANNEX A

Piston Pin and Rings										
Piston Pin / Small End Pin										
	<table border="1"><tr><td>height</td></tr><tr><td>32.8mm</td></tr><tr><td>+/- 0.2mm</td></tr><tr><td>id</td></tr><tr><td>6mm</td></tr><tr><td>+1- 0.5mm</td></tr><tr><td>od</td></tr><tr><td>10mm</td></tr><tr><td>+/- 0.2mm</td></tr></table>	height	32.8mm	+/- 0.2mm	id	6mm	+1- 0.5mm	od	10mm	+/- 0.2mm
height										
32.8mm										
+/- 0.2mm										
id										
6mm										
+1- 0.5mm										
od										
10mm										
+/- 0.2mm										
Piston Rings										
	<table border="1"><tr><td>height</td></tr><tr><td>1.47 mm</td></tr><tr><td>$\pm t$</td></tr><tr><td>+/- 0.02mm</td></tr></table>	height	1.47 mm	$\pm t$	+/- 0.02mm					
height										
1.47 mm										
$\pm t$										
+/- 0.02mm										
ONLY ORIGINAL PISTON AND RINGS MAY BE USED, nrvo RINGS MUST BE FITTED TO THE PISTON AT ALL TIMES										

ANNEX A

1 nition Coil

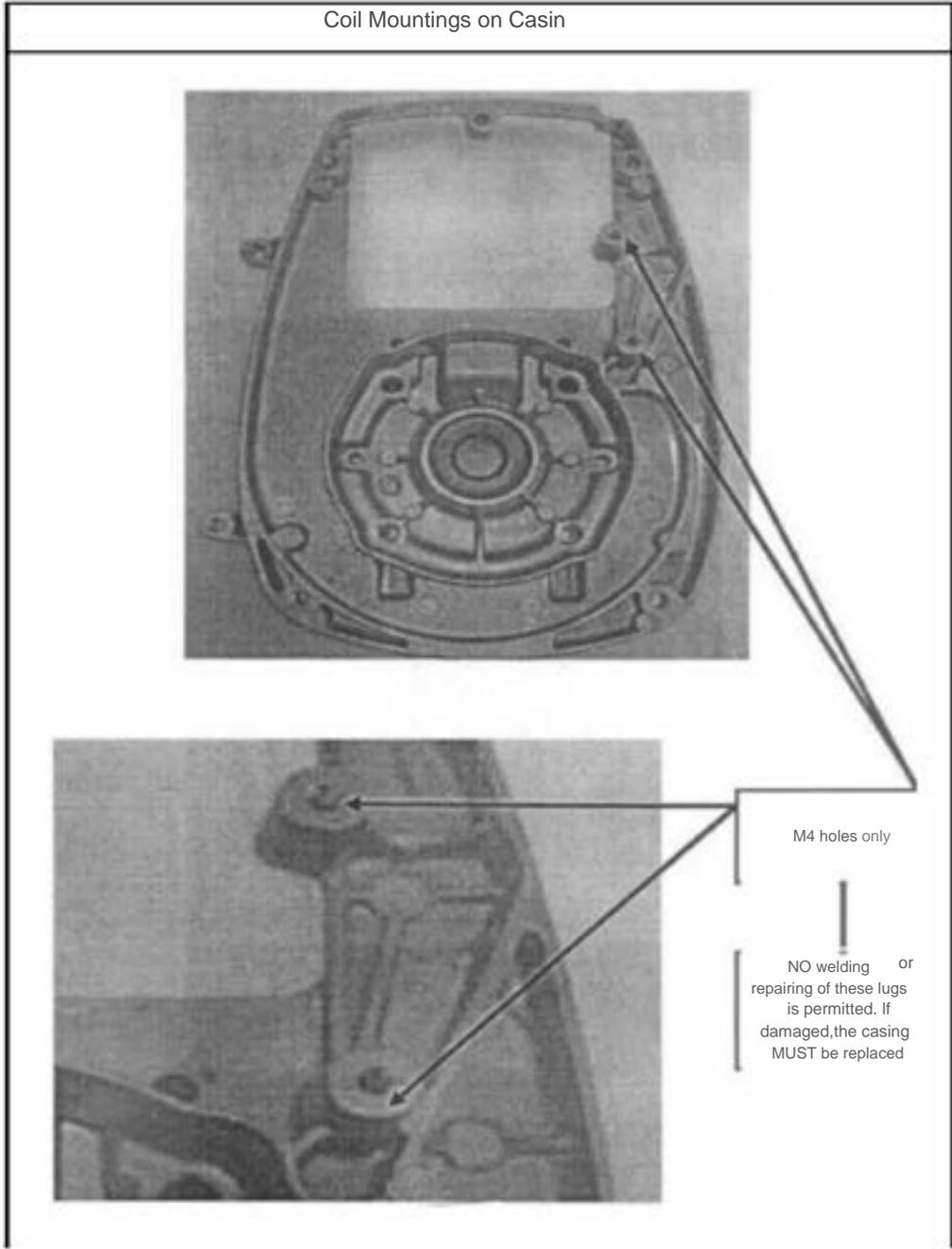


FJ 2007 Model only

Mounting - M4 screws used for a backing coil must have thread from top to bottom and may **NOT** be machined

ONLY Y TYPE FJ 2007 PERMITTED

ANNEX A

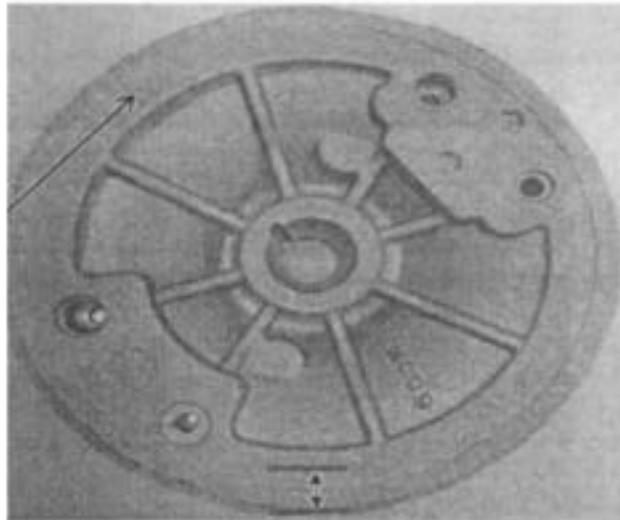


ANNEX A

FI heel

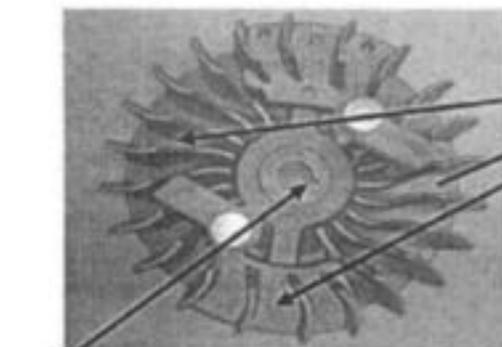
FJ 2007 Model only

MASS: 378
grams
minimum-
measured
without
nuts,
boll
and
washers



must have
"FJ"
CASTING
MARK

Only surface were machining is allowed to minimum wei ht obtain the



keyway groove - max width 2.39 mm

Keyway groove verified with a "no go guage" - thickness of 2.40mm.

NOTE
casting
marks

ANNEX A

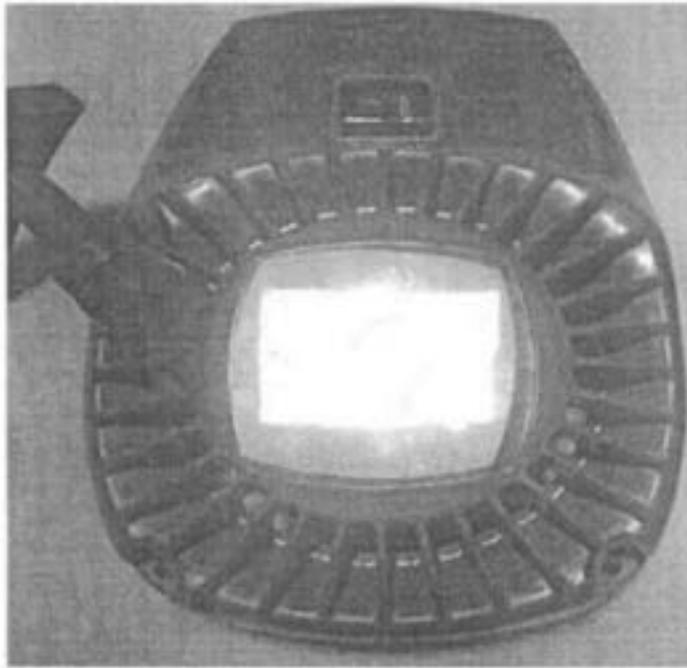
COMER CSD SP EC:IFI CATIO N SHEET 2D1S -

158677/8

FI	heel Woodruff Ke and Starter Cover
<p data-bbox="699 684 1243 716"><u>Flywhee I Woodruff Key</u></p>	
<p data-bbox="350 1058 1073 1094">The flywheel key may be removed completely. There is no further specification on the keyway if used . Ignition timing may therefore be adjusted by rotation of the flywheel .</p>	

ANNEX A

Flywheel Cover

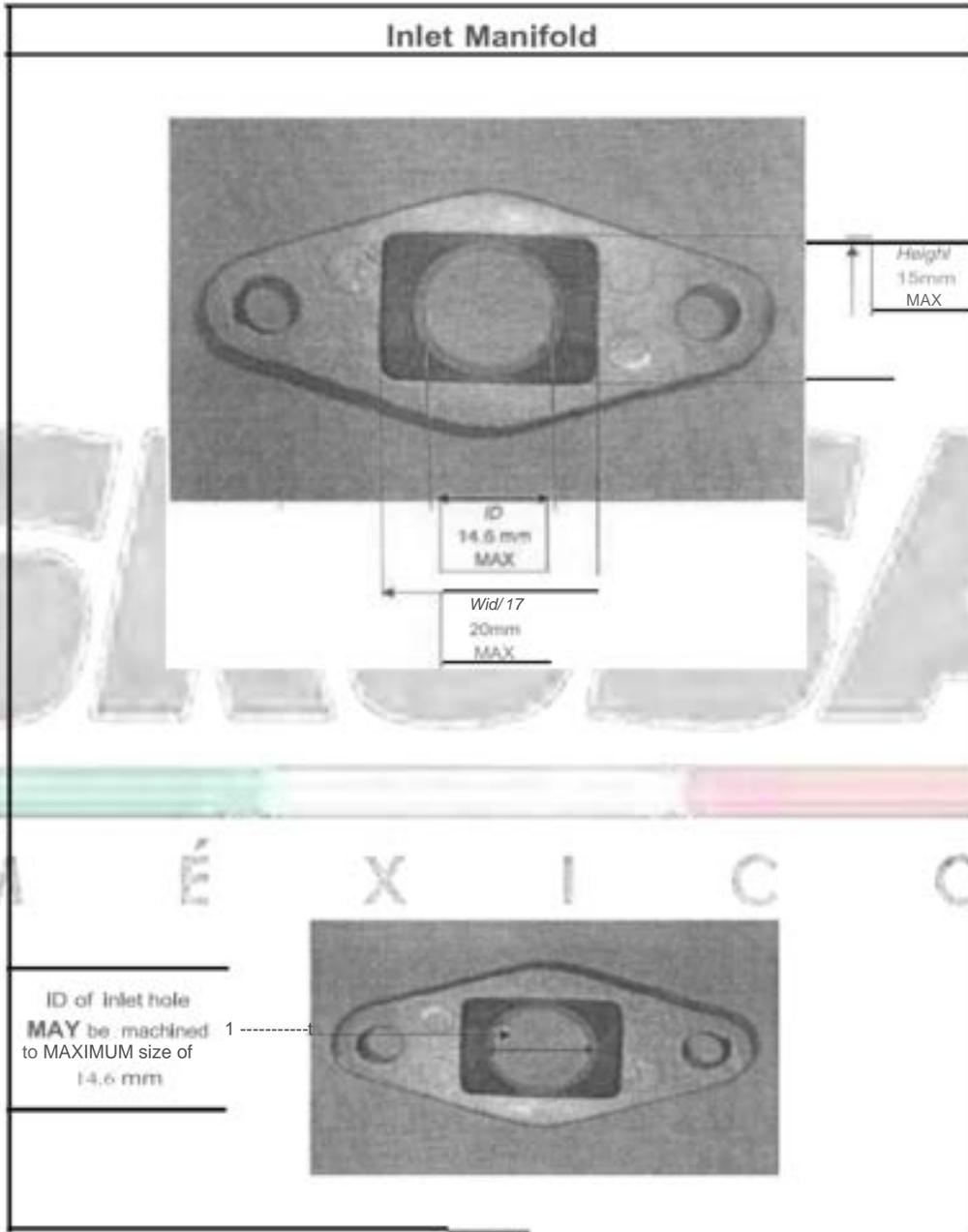


SKUSA



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ANNEX A





ANNEX A

Clutch

Clutch Hub



overall
height
9.7mm
± 0.1mm

minimum mass - 113 grams

no machining permitted

Clutch Spring



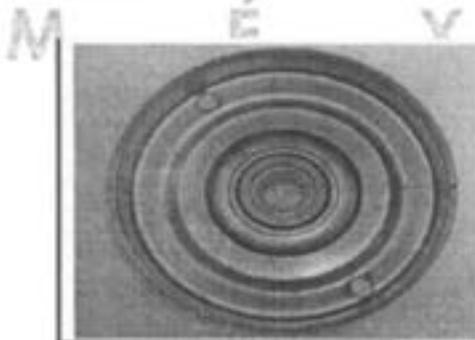
Clutch
Spring
thickness
2.0mm
± 0.05mm

Clutch Spring weight (each)
5.6 grams minimum
6.9 grams maximum

only original springs may be used

Clutch Drum

Pinion



Clutch Drum ID

66.6mm
MAX

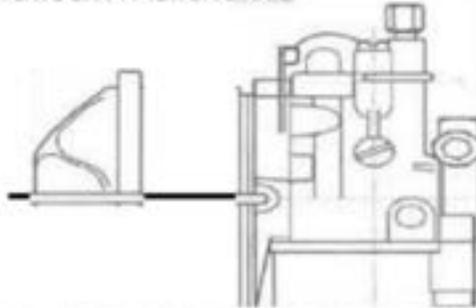


ANNEX A

Pinion • 10 tooth • 219 pitch
ORIGINAL TYPE ONLY

Carburettor

DEL. L'ORTO S.M.A. 14-121. ORIGINALE

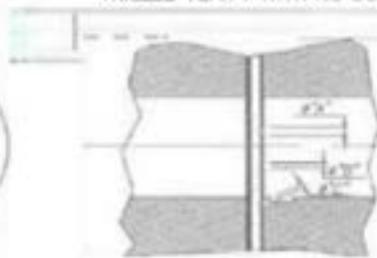
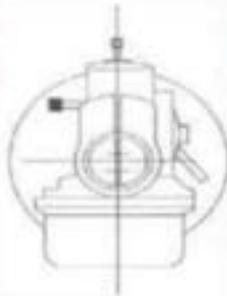


VENTURI Ø 12 MAX
USCITA Ø 14 MAX

AT HOLE SIZE = 1.5 mm Max

The maximum internal diameter of the seat is 1.50mm. The emulsion tube must remain standard as supplied and may not have an internal diameter greater than 1.80mm
The side bleed holes from the emulsion tube are subject to the following maximum dimensions
Top 1.25mm Bottom 0.90mm

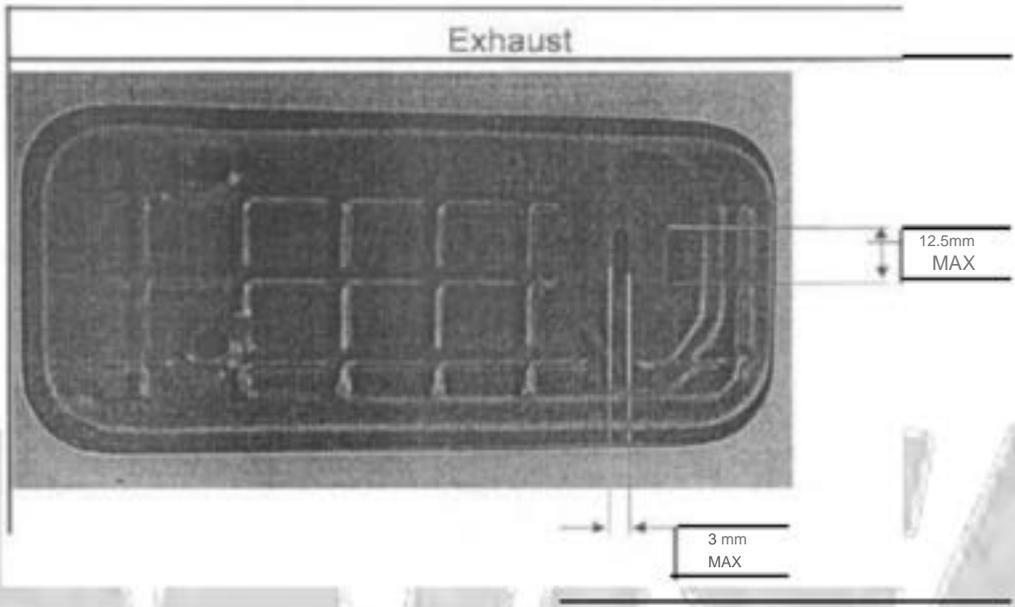
CARBURETTOR
NOZZLE VERIFY WITH NO GO



dia. star "A" = 1.26mm no go
diameter "B" = 0.81mm no go
diameter "C" = 0.81mm no go

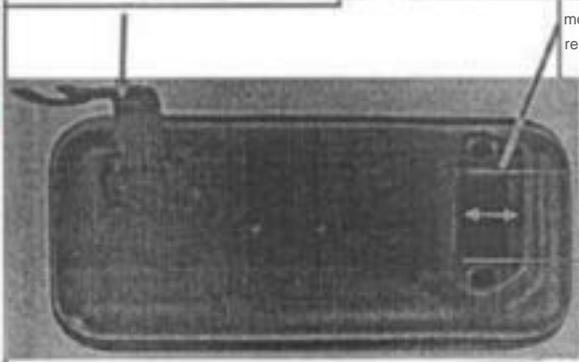
Please see notes at the end of this specification sheet for further carburettor information.

ANNEX A



Bracket MAY be removed

The baffle may either remain in place, if it is supplied, or alternatively it must be completely removed. No additional modification of the baffle is permitted if it remains in place.



ANNEX A 3.

COMER 50cc ENGINE

3.1. ENGINE: OEM stock only without any modification in any of its parts. This category is OEM stock in all its parts.

3.2. SPARK PLUG: NGK BPMR6ANGKR only.

3.3. CYLINDER/ENGINE HEAD: OEM COMER 50cc without any modification is prohibited to have rebuilt and re-nicasil cylinders as well as porting, joning, roughing, scoring at the base of the cylinder or adding material to the cylinder's internal parts. The cubic capacity of the combustion chamber cannot be less than 6.7cc. Taking as measurements the illustrations in the COMER 50cc specifications annex. The cubic capacity of the combustion chamber cannot be less than 6.7cc. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.4. RESTRICTOR, INTAKE AND EXHAUST: INTAKE RESTRICTOR: It is mandatory to use an intake restrictor with the following internal measurements; 19.9390 mm long by 13.2538 mm high by 1.900 mm thick (with a tolerance of 0.254 mm) with black anodizing. Loss of the anodizing on the inside will be grounds for a penalty as stipulated in the general regulations of the SKUSA MEXICO Championship. EXHAUST RESTRICTOR: It is mandatory to use the exhaust restrictor with the following internal measurements; 25.400 mm long X 12.700 mm high X 1.900 mm thick (with a tolerance of +.254 mm) with black anodizing. Loss of the anodizing on the inside will be grounds for a penalty as stipulated in the Technical or General Regulations of said category.

3.5. PISTON: OEM for COMER 50cc stock only, no treatment or modification is allowed, and must have a height taken from the piston skirt to the top of the piston of 40.6mm. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.6. RING: OEM for COMER 50cc stock only, use of both rings is mandatory, no treatment or modification is permitted.

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It must have a thickness of 1.47mm +/- 0.02mm. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.7. PIN: OEM for COMER 50cc stock, no modification is allowed in weight, size and shape.

With a length of 32.8mm +/- 0.2mm and an outer diameter of 10mm +/- 0.2mm and inner diameter of 6mm +/- 0.5mm. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.8. CYLINDER BASE PACKING: Free

3.9. CRANKSHAFT AND CONNECTING ROD: OEM for COMER 50cc stock without any modification with a total weight with piston, pin, clips and rings of 670grs minimum.

Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.10. BEARINGS, CRANKSHAFT SEALS: Original OEM COMER 50cc and can be replaced by their equivalent from a different brand or supplier (the use of ceramic bearings or exotic materials is not permitted).

3.11. CLUCTH. – Original OEM COMER 50cc Without any type of modification or addition of material.

The clutch pads body and the clutch bell must not contain excessive grease or oil and must maintain their original position. Any treatment on the clutch pads is prohibited. Re-pasting of the clutch pads is not permitted. In the clutch test the clutch must not exceed 3700 rpm. The minimum weight of the clutch hub must be 113 grams, with a height of 9.7mm +/- 0.1mm and a width of 49.5mm as a minimum, without any type of machining or modification. The inner diameter of the clutch bell is 86.6mm as maximum. The minimum weight of the springs is 5.6 grams and maximum weight 5.9 grams, with a thickness of 2.0mm +/- 0.05mm, with 8.5 turns of the spring. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.12. ENGINE COVERS (CASES): ENGINE COVERS (CASES): Original OEM COMER 50cc made of aluminum material without any type of modification or machining inside, with a minimum internal diameter of 67.2mm, and a minimum height of 19.5mm.

ANNEX A

Taking the 45.9mm bearing as the center, packing between the CASES is NOT allowed. Taking as measurements the illustrations in the COMER 50cc specifications annex.

3.13. CARBURETOR: Original OEM COMER 50cc Dellorto SHA 14-12L original, without any modification, with the upper hole of the emulsion tube a maximum diameter of $A=1.25\text{mm}$. The lower holes of the emulsion tube must have a maximum diameter of $B=0.80\text{mm}$. Taking as measurements the illustrations in the COMER 50cc specifications annex The main jet is free. The venturi will be measured with a tool or it must not enter measurement 0.476" "No-Go"

3.14. GASOLINE AND OIL: Specified in the sporting regulations with a 20:1 mixture.

3.15. AIR FILTER: The use of a cone or cylindrical type air filter will be mandatory for this category. It is NOT permitted to burn or remove the textile and/or metal filter cloth.

3.16. STATOR: Original OEM COMER 50cc. Without any modification or machining, with a maximum opening for the shim of 2.39mm.

With a FJ2007 model steering wheel, without any type of modification or machining, with a minimum weight of 378grs, without nuts, washers, bolts or screws.

3.17. COIL: Original OEM COMER 50cc. Original only without any type of modification or machining, black color, with a diameter of the fixing screws of 5mm wide and 7mm long as maximum.

3.17.1 IGNITION TIMING -Remove the spark plug -Remove the cover (ignition) -Install the measuring instrument in the spark plug hole -The measuring dial should be at zero (0) -The rack should be rotated counterclockwise until the first magnet is exposed to the left of the coil. -Observe the edge of the coil. The edge on the left side (part closest to the center) lines up exactly with each other. The union of these two pieces will determine the timing for ignition. -Rotate the rack again now

ANNEX A

clockwise to align with the magnet with the left side of the mounting edge. The edge of the edge on both sides should read (RH) .050" to .060"

3.18 EXHAUST: Original OEM COMER 50cc, only the undrilled exhaust is allowed, without any type of modification, with a maximum inlet width of 25.7mm and a maximum length of 13.2mm, with an exhaust outlet diameter of 3mm maximum width by 12.5mm maximum length. Taking as measurements the illustrations in the COMER 50cc specifications annex. The measurement of the outlet diameter for the exhaust will be 0.110" x 0.475" measured with a "No-Go" tool.

3.19 FRONT AND REAR GEAR (Front pitch in CLUTCH): 10 teeth, (Rear pitch): 89 teeth, which may be original or aftermarket (non-original).

5. CHASSIS

5.1. CHASSIS: PUFFO or BABY KART type.

5.2. TRACK WIDTH (rear axle): Maximum 1120mm, rear axle (the measurement will be taken from the outer face of the rim including the rear tires, no part of the kart may exceed the maximum measurement of 1120mm.

5.3. AERODYNAMICS: Original without modifications.

5.4. RIMS AND TIRES: Maximum width of rims and tires combination must not exceed 33.25" in running circumference.

5.5. DRY TIRE TIRES: EVINCO SKH Brand (Blue)

5.6. RAIN TIRES: Free.

5.7. CHAIN COVER: Mandatory (failure to use it will result in a penalty).

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5.8. BODYWORK: The only bodywork permitted must be plastic with the following homologations CIK, FIK or IKF/WKA consisting of side pontoons, rear bumper and front bumper. No part of the kart may exceed the track width permitted in point 4.2 of the regulations.

5.9. REAR SAFETY FENDER: Mandatory CIK FIA or IKF/WKA Plastic.

6. ENGINE CLAIM

6.1. Any competitor (pilot of the same category only) may claim the engine from another competitor under the following conditions: **THERE IS NO PROTEST OF ENGINE**

The claimant must claim the engine in writing from the driver of the claimed engine before the final race has finished and must have deposited the amount stipulated in paragraph C in cash to the director of SKUSA MEXICO and its written claim subject to what is described below:

A) The claimed engine will be marked and photographed for identification and must be used on at least two dates of the SKUSA MÉXICO Championship in the calendar year. If the claim is on the last date of the calendar year, it must be submitted on at least two dates of the following SKUSA MÉXICO championship.

B) The claimed engine will have and must pass the technical inspection. (This does not guarantee that the engine will pass any technical inspection in the future), the above must be reported to the claimant.

C) The claiming pilot shall pay the claimed engine pilot the amount of

\$1,500.00 in cash or its equivalent in national currency at the exchange rate of the Bank of Mexico.

D) The claimed engine will be delivered to the claiming driver under the supervision of the Technical Director and the Race Director.

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E) The claimed engine must include: Engine, clutch, carburetor, air filter (kidney), exhaust system, electrical harness, relay and switches, does not include: engine base or chain.

F) If there are several pilots claiming the same engine, it will be raffled off the engine between the drivers claiming said engine.

Failure to deliver the claimed engine to the claimant driver will result in loss of points (zero points) from the trophies of the date where the claim occurred for the claimed driver and the corresponding provisions of point 19.5 of the general regulations of the SKUSA MÉXICO Championship will be applied and the general director of the event may, at the discretion of the driver, suspend the driver for the remainder of the championship.

SKUSA MEXICO Championship will have the first right of claim on any claim that exists on said engine at an economic value of 1,300 dollars or its equivalent in national currency at the exchange rate of the Bank of Mexico.

NOTE: The Technical Director will disqualify a competitor visually, and only in case of doubt will the Technical Director resort to the measures of these Technical Regulations.

These regulations will be in force from the date of publication in March 2020, and may be modified by the technical council of the SKUSA MÉXICO Championship for its best operation.

M É X I C O