# Lasa Performance

## <u>Jetting & setting-up RECOMMENDATIONS for Casa</u> Performance SS200 + SS225 + SS250 kits

## LAST UPDATED 21.12.2019

## **SS200:**

Carburettor: Dell'Orto VHSH 30 (30mm)

Atomiser : DP268 Main Jet : 166- 180 Idle Jet: 60- 64

Idle jet diffusor (this is found under the idle jet): B48

Slide: 50 B2

Needle: U16 (1<sup>st</sup> position from the top)

Float needle valve: 300 Float weight: 9gr.

Mixture screw: 1.5 turns from inwards position

## Alternatively.....

#### **SS200:**

Carburettor: Dell'Orto VHSB 34LD (34mm)

Atomiser : DP267 Main Jet : 165 – 175 Idle Jet : 55-60

Idle jet diffusor (this is found under the idle jet): CD1

Slide: 40

Needle: K24 (1st position from the top)

Float needle valve: 350 Float weight: 9gr.

Mixture screw: 1.5-2 turns from inwards position

Other set-up info:

- Exhaust Casa Performance Protti
- Squish: 1,35mm
- Casatronic Ducati ignition with 'Sport' CDI
- Carburettor without filter / sidepanel with hole cut-out
- Cyclone 5 Pro gearbox with 17 x 47 primaries (final drive ratio 5.36:1 using 82 link drive chain with pull-down top chain guide)

## Alternatively.....

## <u> SS200 :</u>

Carburettor: Dell'Orto PHBH (30mm)

Atomiser: AV268 Main Jet: 152-160 Idle Jet: 55-60 Slide: 50

Needle: X7 (2<sup>nd</sup> position from the top)

Float needle valve: 300

Mixture screw: 1.5 turns from inwards position

Other set-up info:
- exhaust Gori GP50
- Squish: 1,35mm

- Casatronic Ducati ignition with 'Standard' CDI

- Carburettor with foam filter / sidepanel without hole cut-out

- Cyclone 5 Pro gearbox with 17 x 47 primaries (final drive ratio 5.36:1 using 82 link drive chain with pull-down top chain guide)

## SS225:

Carburettor: Dell'Orto VHSB 34LD (34mm)

Atomiser : DP268 Main Jet : 165 – 175 Idle Jet : 53-58

Idle jet diffusor (this is found under the idle jet): CD1

Slide: 40

Needle: K24 (1<sup>st</sup> position from the top)

Float needle valve: 350

Mixture screw: 1.5-2 turns from inwards position

Other set-up info:

- exhaust Casa Performance Protti
- Squish: 1,35mm
- Compression ratio: 11,5:1
- Casatronic Ducati ignition with 'Sport' CDI
- Carburettor without filter / sidepanel with hole cut-out
- Cyclone 5 Pro gearbox with 17 x 46 primaries (final drive ratio 5.27:1 using 81 link drive chain)

## Alternatively.....

## **SS225:**

Carburettor: Dell'Orto VHSB39 (39mm)

Atomiser : DP268 Main Jet : 195 – 205

Idle Jet: 56

Idle jet diffusor (this is found under the idle jet): B50

Slide: 50

Needle: K24 (3<sup>rd</sup> position from the top)

Float needle valve: 350 without fuel pump (or 250-300 with fuel pump)

Mixture screw: 1.0 turns from inwards position

Other set-up info:

- CasaCase (with ported transfers)

- Casa Performance CNC inlet manifold

- exhaust Casa Performance Protti Race

- Squish: 1,35mm

- Casatronic Ducati ignition with 'Sport' CDI

- Carburettor without filter / sidepanel with hole cut-out

- Cyclone 5 Pro gearbox with 17 x 46 or 18 x 48 primaries

## SS250 (kit SS225 with 64mm stroke crank = 246cc):

Carburettor: Dell'Orto VHSB 34LD (34mm)

Atomiser : DP268 Main Jet : 175 – 180 Idle Jet : 55-60

Idle jet diffusor (this is found under the idle jet): CD1

Slide: 40

Needle: K24 (2<sup>nd</sup> position from the top)

Float needle valve : 350 Float weight : 9gr.

Mixture screw: 1.5-2 turns from inwards position

Other set-up info:

- CasaCase (with ported transfers)
- exhaust Casa Performance Protti X53t or Protti X53tl (long stroke exhaust)
- Squish: 1,25mm 1,45mm
- Casatronic Ducati ignition with 'Sport' CDI
- Carburettor without filter / sidepanel with hole cut-out
- Cyclone 5 Pro gearbox with 18 x 46 primaries

## **General notes applicable for all Casa Performance SS kits**

#### **GENERAL**

There are thousands of different variations to set up an engine and everyone has their 'favourite' exhaust, carb and ignition. We can't list every combination but we STRONGLY advise that if you do decide to fit the kit yourself, once done, take it to an official Casa Performance dealer to get everything checked over.

These are amongst the most powerful 'out-of-the-box' bolt-on performance kits on the market so ALL your other engine components MUST be in tip top condition.

Some studs have minimal thread sections so ensure that when tightening the cylinder head nuts that these do not run out of threads. If this happens, although they will feel tight the nuts will not arrive fully down

onto the cylinder head. Consequently the cylinder head will blow and you could possibly hole a piston.

All SS kits supplied by RLC have an extra 2 x exhaust 'stepped' studs supplied as standard. These have 8mm sections to be inserted into the cylinder, and 7mm sections for fixing the exhaust U bend manifold to the cylinder. The reason for this is that some exhausts have a tight angle on the U bend manifold section and 8mm nuts with a std. 13mm spanner size are difficult to access.

#### **CARBURETTOR CHOICE & SETTINGS**

## ALL the above mentioned carb and engine settings are PURELY AN INDICATION ONLY

Carb choice is very much a personal choice. The carbs we have used are those listed here-above. We are constantly testing other carbs and as and when we have the settings we will publish these, updating this list.

The carb settings listed here-above were done in Italy - which is somewhat hotter than Glasgow - and as such are only RECOMMENDATIONS as a starting point. Different levels above sea-level and climates will drastically affect carburation so please ensure your scooter is set up to suit your environment. If you take the above settings as gospel and do NOT tailor your jetting for your environment, there is a strong possibility that you will destroy your kit.

Carbs set for other performance kits such as TS1, Imola, Monza, RT etc. will be set up too weak to use with the SS kits. These are the most powerful out-of-the-box kits on the market, bar none. Speed costs fuel. A 20bhp TS1 kit will require considerably less fuel than a 30bhp SS kit so don't even consider using TS1 (or similar) settings for your SS kit.

Colder climates require richer carb settings than those listed.

Mikuni carbs have a noted problem when run at full bore. If the scooter is ridden hard on full bore (e.g. on hard acceleration) and then the throttle is closed off, to then be re-opened partially to maintain a constant (high) speed, the 'step' between certain throttle apertures can cause the temperature of the engine to drastically jump skywards (by as much as 200°!) and this can near-instantly seize, or hole a piston. As such Casa Performance does NOT recommend the use of Mikuni carbs and we strongly suggest the use of a <a href="Dell'Orto">Dell'Orto</a> as an alternative. If you insist on using a Mikuni TMX35, then the settings given here-above are the best that have been achieved.

The use of a Mikuni TMX35 carburettor is AT YOUR RISK.

#### **RUNNING IN**

SS kits and engines need to be run-in properly so avoid long, straight roads where the throttle position and/or speed is constant. It is much more advisable to initially use your scooter around town or on roads where the speed is variable. A sensible running in period is a minimum of 600 miles/1000km. Avoid motorways or freeways during the running—in period.

### **LUBRICATION**

Only use good quality fully synthetic 2 stroke oil at 4%. Some manufacturers recommend lower percentages which *could* be ok but saving money on oil will only result on you spending money on replacement engine parts sooner or later.

#### **ELECTRICAL COMPONENTS**

RLC currently fits only <u>Casatronic Ducati</u> kits. If you use another type of kit, such as the older Casatronic or Varitronic (both manufactured by IDM) these retard by 7-8 degrees when under load. As the revs increase they must be set so that they end up at 16-17 degrees BTDC. If you fit a NON retarding, fixed ignition type, then it MUST be set to 16-17 degrees.

The SS kits are designed to work and perform at quite high revs so use a suitable 'cold' sparkplug such as **NGK BR9ES** or similar, to avoid pre-detonation.

#### **GASKETS**

Although the kits come supplied with a head gasket, these are generally NOT used during assembly. RLC recommends the use of a good quality gasket sealant for all gaskets such as **ThreeBond**.

#### **TORQUE SETTINGS**

The torque setting for the 4 nuts of the main cylinder retaining studs is **25Nm**. The torque setting for the additional Allen screws and the 2 cowling fixing studs on the cylinder head is **22Nm**.

#### **GEARING**

- If using an SS kit in conjunction with a Cyclone 5 Speed gearbox, use the Cyclone 5 Pro version only.

#### **EXHAUST**

The SS kits come with a TS1/Imola type oval exhaust flange fitting and it therefore these are the exhaust types to fit. Always use 'Race' versions rather than 'Touring' versions. Some exhausts such as Franspeed pipes have the small stinger pipe running back into the main exhaust body for quite a way (for noise reduction). Ideally this needs to be removed as it causes excessive heat build-up and pre-detonation ('pinking'). If this occurs you could destroy your kit. Ask your supplying dealer about the internal stinger length.

#### **PRESSURE TEST**

If you are assembling an engine, carry out a pressure test to ensure all parts are completely airtight. **THIS IS OF UTTER IMPORTANCE.** Want to see how it's done? Then check out **this video**.

#### **FUEL TAP**

Fit only a <u>Fast Flow type petrol tap</u> and ensure the passage of the fuel line is not obstructed. Check fuel flow. We strongly recommend the use of a simple membrane type <u>fuel pump</u> (this does not require battery power to work).

#### **WARRANTY**

As with all performance products, SS kits do NOT come with any form of warranty or guarantee. If you do have a claim, RLC will only consider this from an authorized Casa Performance dealer. A fiscal receipt for any work undertaken MUST be provided with the claim. Any claim arising from a privately fitted kit, or by a dealer who is NOT an authorized Casa Performance dealer, will NOT be considered. However, if there is a genuine problem, we will cover it, within a reasonable post-sale time-scale, at our discretion. There are thousands of different variations to set up an engine and everyone has their 'favourite' exhaust, carb and

ignition. We can't list every combination but we STRONGLY advise that if you do decide to fit the kit yourself, once done, take it to an official Casa Performance dealer to get everything checked over. If you wish to use an alternative non-approved dealer, call us and we'll say yes/no whether we will consider that dealers work should a problem arise.

'So and so' down the pub who is an absolute genius - but strangely doesn't have a shop - is NOT a reputable dealer.

#### **VIDEO FITTING GUIDE**

As with most Casa Performance products, we have posted an assembly video and this can be see **HERE!** 

If you have any doubts or questions whatsoever, please contact your supplying **Casa Performance dealer** or **Rimini Lambretta Centre** 



© Copyright Rimini Lambretta Centre 13.12.19. All rights reserved.