

Short Frame Scouts Down Under

Indian introduced the model G Scout in 1919 and it evolved over more than a dozen years 'til the factory dropped the model after 1931.

I regard all Scouts produced between '19 and '31 as Model Gs', or "Vintage Scouts", the 101 model being simply the final form of it.

This article is about the 1926-on models, and some differences I have observed between them and the 101 introduced in mid 1928.

In '26 the engine numbering system was changed from an awkward one to a much simpler system.

(Frame numbers were not introduced until 1931, so the eng. # is the method of model/year ID)

Eng #s covered are

AG -1926, 37", short frame

BG – 1927, 37", short frame

BGP – 1927, 45" (new eng. size) short frame

CG – 1928, 37" short frame

CGP – 1928, 45" short frame

DG – mid 1928 on through '29, 37", new long frame

DGP – mid 1928 on through '29, 45", new long frame

EG – 1930, 37", long frame

EGP – 1930 & 31 45" long frame

Tracking the differences in the earlier models from the Scouts' introduction 'till the AG model will be the subject of a later article, and it is even more difficult to plot these changes.

My purpose for writing my thoughts on the subject is that I find that there is very little knowledge on the topic, and with the greatly increased interest in the '20s models, perhaps a few commonly held misconceptions can be put right.

These are my thoughts, based on my observations.

Substantial numbers of the twenties model Indians were sold "Down-Under" (Australia and New Zealand), and many have survived, in contrast to what appears to me to have been the situation in the US.

There are very good reasons for this.

Australia in the 1920s was like America, with the exception that it did not have a great manufacturing capacity, and virtually all motor vehicles were imported, or assembled locally from imported components.

The country itself was very similar to America in that it had huge distances, no existing road system and extremes of great heat and rainfall.

The product developed for use in America could well have been developed just for Australian conditions.

Extremely rugged and durable machines contrasted with the machines available from mother England – nimble and light, designed where there was a pre-existing road network, and not the great distances, heat and the isolation.

The car did not really become available for the common man in OZ until the middle 1950s – they were all imported, and expensive.

A motorcycle was just that little bit cheaper, and an Indian Scout, or J-model Harley Davidson, both with a sidecar attached, could provide transport and communication with the towns for a farming family.

The sidecar was usually locally produced, typically by the Goulding family (before they immigrated to the US) and the Dustings factories in Melbourne, but there were other smaller concerns.

Earlier machines had “genuine” chairs, made by the same company that made the motorcycle, but once these local companies began production they received protection from the government, and sidecar imports were banned.

(Bearing in mind that our sidecars were on the “wrong-side” re America, I wonder how upset the factories really were?)

They were kept in service for many years, and when the family ultimately obtained a car or other mode of transport, they were usually “put aside”, rather than sold and eventually fell into the hands of the boys on the farm, and became what we call “paddock bikes”.

Because they were such rugged reliable machines, and would keep going and going, even with major components missing or not operating, these machines were often literally “ridden into the ground”.

This is why we find most machines in really terrible condition when restoration time comes around – they are completely worn out in every component – the entire power plant (with the exception of the primary drive), wheels, brakes, suspension, all linkages and bushings etc.

Missing are the luggage rack, tool and battery boxes, chain guard and generator belt guards, often the generator itself – anything the young rider would have had to remove to repair a broken chain, or perform any other form of “fix-it” and not be required back on the machine in order to “make it go”.

This also created another problem, which brings us back to what this article is all about – identification of the different features of the different year models.

There was great interchangeability of components between models.

If your neighbors’ crashed machine had some bits that yours needed, especially those “modern” better performing detachable heads and cylinders, or his earlier primary and transmission to replace your blown one.....or that wheel, to replace your buckled one.....

This often results in “The machine has been in the family all its’ life, and would be correct from the factory....” when in fact it was upgraded during it’s years of service, or that later or earlier component was fitted to keep it going, or because current custodian simply liked the different part.

The factory made contributions to the clouding of this issue as well.

Firstly, running changes were introduced, and while these changes might have been announced as “....improvements to the new model....” they had in fact been in production a little while earlier on the previous model – the marketing people doing their job!

Secondly, when a new feature was introduced, none of the now obsolete components would have been discarded – they would have been “used-up”.

Now, what would be the best thing to do if you had a few machines that still had the old features, or a mixture of both, and you’d made a big fuss about all these changes on the new model “... I know.....that order for Australia....they won’t have found about the changes yet, and anyway, it’s too far to send them back.....”

The 1926 Scout was still called the model G, (like all Scouts since 1919) in fact, the model AG.

All had the 37” engine, and the engine # pre-fix was AG.

!927 was the model BG, and saw the introduction of the 45” engine, which was model BGP

The “P” meaning 45”, also known as the Scout 45.

Apart from the power plant changes, the two machines (the 37 and the 45) were ostensibly identical, with the exception of the brakes.

The 45 was available in two models, the Police Special and the Sport Solo.

The 45 model is very rare in Australia, and I think the world.

I have only seen a couple that I rate as genuine.

(Why – a couple of bucks more than the 37”, too much for us poor Australians....)

I think that the various options for handle bars etc were available with either engine size.

The 45 still had the pedestal front engine mount of the 37”, as in all previous Scouts.

That is, two ears cast as part of the crank case.

The 45 cases were I believe interchangeable with the 37, but the flywheel assemblies, conrods, cylinders and heads were obviously different, because of the different bore and stroke.

The larger Chief crankpin was used in the 45, and the heads were retained with seven rather than the six stud and nut assemblies of the 37.

The 45 got the bigger Chief clutch basket and clutch.

This required a change to the primary drive gears, and cases.

I believe the actual gears in the three speed gear box stayed the same.

Note - Indian called the primary case the “transmission”.

The front hub stayed the same in both models, as per the 26 year.

The rear was different.

The 37 stayed the same as model AG, internal band and external band for the foot and the hand brake. on the right hand side.

(Note – all Australian models had to have two independent brakes for registration – domestic USA models did not.)

But the 45 was changed to the Chief set up, internal half shoe and external band on the left side.

This required a cross-over shaft on the frame behind the power plant, and consequent “dimple” in the primaries.

Otherwise, the general cycle parts were the same for the 37 and the 45.

The 45 drum was not enclosed- plenty of dirt etc found its’ way in, and as such, usable drums are now very hard to find, especially so because both the internal and external surfaces of the drum were used for braking.

The wearing surfaces of the drums have been hit from both sides!

The front fender of both models had more valance than the AG, and was secured with two large P-clips to the main fork tube.

The rear also had more valance, and extra stays.

The LH rear stay was also removable to aid with rear wheel removal.

The wire to the taillight was now contained in a metal tube, running along the outside of the fender.

The links from the spring to the rockers now passed outside the fender, rather than through it.

The decompression lever passed through a hole in the tank, instead of a bracket bolted to it.

The Australian machines were all "colonial" models, so as well as the two independent brakes, had a luggage rack, front as well as rear stand, and of course, Indian Red paint – no options!

In September 1927 Indian introduced the 1928 models.

The 37 was model CG, and the 45 CGP.

There were major changes across both models and some changes to the 37, to bring it into line with the 45 – an obvious production rationalization.

The heavier Chief front hub was introduced to both models, so now the Four, Chief and both Scouts used the same hub – only the Prince was different.

The 37 received the same clutch and primary as the Scout 45 and the Chief and Big Chief, more rationalization.

Chief and Scout clutch plates were to remain basically the same parts until the end of production, although the configuration within the clutch varied a little.

There were major changes across the handlebars, headlamp and dash.

The headlight mounting stalks (same headlight) were bolted through the handlebars, acting as the handlebar clamping bolts.

A new dash panel was attached to the handlebars by these stalks.

It replaced the aluminum box, mounted further along the top frame tube, which had contained the light switch and ammeter.

The new dash had enclosed wiring, a different ammeter, different light switch, and provision for its' own illumination with a light mounted in a dome shaped holder, which also acted as a switch for itself, independent of the head and tail lamps.

The lighting switch was only used for a few months, and was also used on the Chief and the Prince.

It switched fore and aft in a line through the on/off position, rather than rotating through its' movement like the earlier and later switches.

This switch is now very rare.

I have handled several over the years.

Even the ones that appear to be in good order disintegrated when I attempted to work on them.

The company claimed a new improved generator and belt.

This goes against everything I have observed.

I can only assume that this meant the DU-7 replacing the DU-5.

Apart from other changes, the DU-5 has a mechanical cut-out, and the DU-7 an electro-mechanical set-up.

More later.

The wiring was contained in a cloth loom where ever possible, instead of being loose wires.

The battery box was mounted lower – more clearance for the saddle springs.

A different electric horn was moved from the handlebars to the left side front down tube, and was operated by a new built-in button, with its' wire running inside the handlebars.

These bars were more streamlined than previously, and had different spirals, which were held to the bars with new large nuts rather than screws and blocks.

The internals for operating the control cables, though similar in principle, were different.

The grips were new.

A major change was the method of mounting the engine into the frame.

Instead of two flat pedestal mounts on the sides, the crankcases were extended forward, and a long through bolt was used.

The frame was changed – instead of the two tubes which extended downwards from the head stem casting turning almost at right angles to continue under the power plant, they terminated at the bottom in two new castings.

These castings also mounted the brake pedal and the clutch pedal, which was moved from a plate bolted onto the primary case, and accepted a long bolt, which passed through them and the crankcases, holding the frame and the motor together in a far more rigid package.

Two horizontal tubes then exited these and ran under the power plant to the rear wheel.

The DLX carburetor became standard on both models, and although some literature showed the domed air cleaner, all the Australian models that I have seen ran the cow bell type of the '27 models.

The footboards were longer, moved forward, and angled differently.

A new magneto was introduced, the NS2, replacing the NS – different end plate and distributor cap.

A new mechanical oil pump was introduced, requiring a different cam case cover.

The timing side pin and flywheel were drilled to allow oil to pass into the crankpin providing direct oil supply to the crank for the first time, or so they hoped and claimed!

The oil pump outlet inside the engine was not actually connected to the pin, Indian seeming to hope that the pressure caused in the crankcase by the downward stroke of both pistons would force the fresh oil in through the small hole in the pin and out through the crank, but in reality I think it just dribbled down into the bottom of the crankcase and the motor continued to operate as a full splash lubrication motor.

The earlier “pump” was more a “restrictor” than a pump, metering a certain amount into the crankcase or preventing the tank from emptying itself into same, thereby causing “wet-sumping”, with the engine running at least.....

The new pump was atleast a pump.

This problem was not addressed until '31 when the pin was extended out to the pump, directing oil through the passage, but not properly fixed until '33 (post Scout!) when the engineers must have realized that if you are going to “pump” more oil in, you had to have some way of getting rid of it, rather than out through the exhaust, the breather, valve covers or anywhere else it could find, and introduced a return pump to the tank.

So the only result that I can see from this drilling of the pins and the timing side fly wheel is that when we pull the engines down to overhaul them today the timing side flywheel is ALWAYS cracked through the drilling.

Note – the drive side wheel is often also cracked, the result of being over tightened, but I have never seen a drilled one that wasn't!

I like to call these “see-through” flywheels.

A shut-off tap was fitted in the line from the hand oiler.

It seems the engineers had similar ideas about transmission lubrication, with a new grooving of clutch plates, drilling of the main shaft etc theoretically causing oil to circulate from the transmission through the main shaft to the clutch, and then to the primary drive gears and back again.

A new saddle with a “half-pan” was introduced.

Exhaust pipe headers were held on with threaded nuts, a change from the push on type.

SCOUT was added in small capitals below the brand name on the tank.

In April '28 (mid season) the Company announced the Series 101 Scouts – no more seasonal changes or annual models.

(Was this because they had to justify bringing in a major change mid-season? They persevered with this policy for a couple of years, not changing the eng # prefix, greying the identifying of what year a particular bike is.)

The most striking differences were the longer lower frame, tear-dropped rather than flat tank, smaller headlight and a front brake.

Engine # prefixes were DG (37”) and DGP (45”).

The factory parts books called them the G101 and the GP101, and distinguished parts which were different to the previous models with a W after their number.

So the 101s were still a model G Scout.

Many of the features which restorers deem to be new with the “101s” were already on the model CG and CGPs - headlight mounting, handlebars, dash, controls, horn button, longer more angled foot boards, through bolt front engine mount, horn type and location, oil pump, brake cross over shaft for left hand side rear brake.

New were the bullet headlight and the lighting switch.

The frame was longer and lower.

The saddle was the same, but mounted differently at the rear, and lower.

Gone were the lugs cast into the frame for the single expansion only springs on either side.

A new plate bolted to the frame rear tubes for the double expansion and contraction springs, and it also mounted the generator.

The new generator was now mounted behind the frames’ vertical seat mast, and was adjusted for belt tension by sliding its’ mounting bracket backwards and forwards along this plate.

Battery location was changed to central in the frame, low and under the generator, on a new bracket between the rear fender and the frame.

Tool box was different.

The only changes in the engine that I have observed, apart from the number prefix, are that the method of attaching the cylinder head for both engine sizes was changed from 3/8" studs and with UNF nuts, to 7/16 UNF bolts.

This would have saved quite a bit in production costs, but it makes a lot of trouble for restorers, with the area where the bolts thread into the cylinder being very thin, and prone to cracking.

Rims were still beaded edge, balloon type tires, and bearings in such were still loose balls.

A front brake was fitted. and the internal half shoe in the rear brake was deleted.

The same front fender mounted differently.

The top mount was a U-shaped piece of flat strap hanging it from the fork, not two P-clips at the side.

I was always lead to believe that the short frame '28 Scouts had the shorter DU-5 generator with the gyro-type mechanical cut out, and the 101s the DU-7, with the internal electro-mechanical cut out.

Some literature and indeed the parts books suggest that the CG and DG Scouts (that is, short and long frame '28s) all ran the DU-7.

However, DU-7s are very rare here in Oz. and DU-5s relatively more common, both on bikes and for sale and at swaps.

I have never seen a DU-7 on a short frame Scout here, and have seen a lot of original and restored ones.

Some of the 101s I have seen have had 7s, and some 5s.

Did these late short frames and 101s have their 5s fitted when the 7s failed, for whatever reason, or as part of maintenance?

Or where they fitted in the factory?

Why?

Well, the DU-5 is quite different to the DU-7 – not many of the main parts interchange, but they will both fit into either mounting bracket, and do not require any change in the wiring of the bike.

What if Indian had purchased a large quantity of 5s, before the 7 was released, or after release at a bargain price from the manufacturer, who had a large stock of them?

The 5s still worked quite well.....now, that order for Australia.....we could save a lot of money here, and there's no way they'd know.....

I have read some reports that the head stem was set a different angle but no, it's the same.

The frame was lengthened behind the motor rear mount, effectively moving the motor forward in the overall length of the frame, and the seat height lowered.

After exiting the headstem, the top tube raked down towards the rear axle more quickly, lowering the seat height.

This meant a smaller “thinner” gas tank.

The tank became “teardrop shaped” as well, and this longer, lower effectively “stretched” frame completely changed the look of the machine, and the handling.

The front end was the same, save the addition of a lug on the fork leg to anchor the brake reaction set up, and the aforementioned fender mounting difference.

The handling of the two bikes is very different – the result of the longer frame, and the riders’ lower seating – lower COG.

While I don’t agree that the 101 has “legendary” handling, the long framed bike is more stable on the road than the taller shorter framed model – but is that relevant when riding 90 year old motorcycle?

Is that why we ride them?

Air cleaner was different, the cow bell with its’ built-in choke mechanism was swapped for the round rock deflector, and the choke was now part of the carburetor, meaning different #s for both the carbies.

Now, the last short fame model Gs, the CG and CGPs were produced officially for only about eight months before the longer frame model G101s took over – or were they?

The short fame through bolt front motor mounted model G Scout is regarded as being quite rare in the US, but it is abundant in Australia, and from my observations, parts of Europe (specifically Holland and Scandinavia.)

The early long frame model G101s are relatively quite rare in Oz, unlike the ‘29ish models (higher engine numbers.)

So, were the obsolete CGs and CGPs send abroad until all the obsolete parts were used up?

At some point the models DG and DGP were upgraded to specs that most people like to call 1929 models – but remember, no yearly models from the factory.

The US based 101 Association says this is from Eng# DG 4.....for the 37 and DGP 4....for the 45”.

I have no knowledge on this subject.

Some of the changes that came in were the fitment of well based rims and there for different tires, and also Timken type tapered roller bearings in both hubs.

The de-compressor was moved from a through the tank mounted rod to a foot operated device, meaning a different tank.

At some point, eng # prefixes were changed to EG and EGP – 1930 models?

I don't know of many actual differences in the bikes, save the headlight.

"E" prefixed models are very rare in Australia.

By late 1929 the world wide depression had greatly affected the economy in Australia, and also, about that time there was a trade war between USA and our dear mother England.

A huge levy was placed on American imports meaning that Indian (and Harley Davidson) motorcycles virtually disappeared from Australian showrooms.

I know of almost no "new" Indian sales here in 1930, none in '31, two in '32, and none in '33.

English motorcycles were sold in great numbers.

Indians did not re-appear until 1934, and then only in small numbers until the Lend-Lease situation of World War two.

So I can't tell you much about the '31 models, only what I've read in books.

But for the record, they had different handlebars and headlight, fully enclosed rear brake, back on the RH side of the machine.

This meant a different frame.

A throttle controlled oil pump was fitted, along with the longer timing side pin, to direct oil into the crank.

The generator changed to the Autolight from the Splitdorf, consequently the belt guard too.

This different rear brake limits this model for retro "hotting-up" very popular these days.

Many people believe that they can turn their 90 year old small capacity bike into a far more usable machine, that is, make it go faster!

There for better?????

(Well you can, to a degree, if you really want to, but why don't you buy a later bike?)

If you do have to go that way, and that can be a later article, the '31 model G101 is not suitable.

The simplest way to make it go faster is to give it more power.....stroke it, but you need to complement that with a change in gearing, and you can't on the 31 model.

Rear sprocket is not change-able, and the front (engine) sprocket cannot be increased very much, as it fowls the kicker.

The 101 did really reach the end of its development, didn't it.....

Step forward the Chief!

I think the factory engineers had it right when they dropped the model G101,

The US market was ready for the development of the Chief, and English motorcycles were showing what was needed for a fast handling race bike...enter the Sport Scout – a completely different bike.

One of the stories about the 101 is that it was the choice of wall of death riders, because of this “fabulous handling”.

From talking to old timers and observations in Oz, it was not.

The popular model was the last short frame – perhaps because it was so plentiful, compared to earlier Scouts, and when a long frame (101) was used, it usually had the frame cut and shortened at the casting where the rear axle goes through, making the wheelbase shorter.

In conclusion, you can see that many of the features that are regarded as “101” were already introduced on the last of the short frames.

I think the 101 is simply the final form of the fabulous model G Scout which ran from 1919 'til 1931.

Is a 1950 Chief better than a 1936 Chief?

It's simply different, and later.

Yes ,it's more modern, but if that was your reason for buying/owning/riding a motorcycle, you wouldn't bother with this old junk, and buy a brand new bike.

How boring!

I regard the model G as the beginning of the “modern” motorcycle, with its' cradle frame, semi-unit power plant construction, lower seating position, simplified controls and fabulous reliability, compared with its' predecessor, the Power Plus.

As greater power was needed for the improving roads, it evolved into the Chief, which was Indians' mainstay until the end.

I regard all 1919 to 1931 Scouts as equal and totally desirable if you like old American motor bikes.

Thankyou Charles Franklin and The Indian Motorcycle company for designing and producing them!

I hope this article has cleared up some miss-conceptions about the lovely little Scouts.

If you all ready knew all that, OK, this article was not for you, but I find lots of people who don't.

Please email me if you believe I am wrong – my observations are based on.....my observations!

Tell me what I've left out, got wrong, or simply point out the oddities that we know exist.

One thing that I have learnt with Indian, you really never should say never, never ever.....honest injun!

Jim.