Zundapp – Buyers guide

A Bella Buyer's Guide

So, you've always wanted a classic scooter. You want something reliable, something that can keep up with today's traffic without breaking too much of a sweat (motorways excluded), something well-engineered that won't break too easily, something that looks good, something with an engine that has a good pedigree, something with an electric starter if possible. The answer is easy: a Zündapp Bella!

So, you've started to look at adverts and quickly found out that there isn't just one Bella. While they look similar, there are many different models. Kick or electric start? 150 or 200cc? What to choose? And then, when you find a model you like and see an advert for it, how do you know it's worth buying?

This short Zündapp Bella buyer's guide will answer some of these questions for you.

Do you want something ready to ride or do you enjoy a project?

The first question to ask yourself is whether you want something that is roadworthy upon purchase, or whether you want a restoration project.

Bellas are offered in all states. From ready to win a ribbon at a show to 'some work required'. Believe it or not, this one was offered up for sale:

If you want a ready to ride project, read on below. If you enjoy a restoration keep the following in mind:

- Whatever model you prefer, try to buy one that is as complete as possible. Some parts can be hard to find and if they are on the bike, it makes a real difference; more on that below. If you want to risk a basket case, familiarise yourself with the parts list so you know you've got most bits in the baskets. Having to buy many parts separately, is disproportionally expensive. On top of that there are quite a few models and they all are a bit different; so, finding the right part can take some time and every seller on e-bay thinks their old bolt is made of gold these days so the cost can add up quickly.
- While getting a new registration is possible if papers are lost, it is a bit of a hassle and does cost money. If you can get a bike with registration, life is easier.
- Join a Bella Club. The Zündapp Bella Enthusiasts Club in the UK or the Bella IG on the continent. Members are willing to sell true enthusiasts parts for far more reasonable prices than traders. Moreover, you get a whole new set of contacts that can help you out when you inevitably have questions during the restoration.
- Always keep in mind that a finished article is **a lot** cheaper than restoring it when you add up the hours and cost involved. For many, restoring is the fun, but beware of the cost.

What model to buy?

Zündapp produced quite a few different Bella models, not counting special editions like for the German postal service. Four models of 150cc (the R 150, R 151, R 153, R 154), five 200cc models (R 200, R 201, R 203, R 204, Bella 200), A 175 cc model (Bella 175) and a model for the USA market the 'Suburbanette'.

The first choice to make is 150 cc or 200 cc. The 150 cc models were meant for city use. They have a smaller headlight as they weren't intended for long stretches in the dark and they are a bit slower to get up to top speed which is also a bit lower than for the 200cc model. The weight is the same as the 200cc models otherwise, so you do notice the difference in power. Given modern traffic is faster than back in the day, 200 cc may be better for you if you plan to be in traffic a lot or make it a daily ride.

Another differentiator is power. As the models decrease in age, the power of the engine grows. Between the first 150 cc model, the R 150 (7 and a bit HP) and the Bella 200, the last 200cc model to be made, with over 13 HP, is a big difference. In short, the 150cc models and the R 200, R 201 and R 203 amongst themselves do not show that much difference in power. The R 204 with its new exhaust design and diagonal cylinder and the Bella 200 are where you see a difference.

As time went on, the scooter lost its status as second or even first car in the family and Zündapp cut cost as time went on. The earliest models were more expensive to make. The footboards are cast aluminium as are the battery housing and the main stand. In later models this is platework and the stand is steel. The rear luggage racks have also been removed for the late small engine models. Many find the exhaust system of the R 204 and Bella 200 not as subtle as the original pipes that were hidden from view under the footboards.

While they give more power, they are indeed a bit more in your face.

So, think about what's important to you; as models are younger, you're generally trading higher top speed and power for quality in some parts. That being said, all are great feats of engineering and the innards of all bikes are pretty much the same quality.

Finally, there is the choice of kick starter vs. electric starter. At first, an electric starter was considered luxury and many of the first models have a kick starter. Later models tend to have an electric start engine, but some R 204 kicks tarter models were made, so most combinations are possible.

The electric start works quite well although the battery system of the Bella is not over-dimensioned like some of the other parts are. You'll need to keep your batteries healthy, but if you do, the electric start works fine. It does of course make for a more complex electrical system and there are more parts that can break. If you like simplicity and don't mind a kick starter, that might be the option for you. Keep in mind that Bellas are heavy machines, so if it doesn't start after a few kicks, you'll be grateful for the electric start as pushing them to start is hard work.

What to look out for when doing a viewing?

There are a number of key things to look for when buying a Bella. In no particular order make sure you check the following elements before buying or putting in an offer.

Platework

The Bella has a lot of platework between the footboards, the headlight cover, the mudguards, body shell and leg shield. Some Bellas have been stored dry and the platework will be in OK condition. However, many have been outside and platework repairs can be very costly if still possible. So, try and buy a Bella where the platework is OK. In the below picture the key spots are indicated:

- The leg shield can tear where the protective strip at the top meets the ignition dash
- The bottom of the legs shield where it is screwed to the footboards can be rotten and the screw holes in the footboards, especially on the cast aluminium ones, can be cracked.
- There is only a small bit of metal on the front mud guard below the front swing arm which can be torn
- The toolbox on the newer plate steel models can be rotten at the bottom
- The headlamp cover is made of a somewhat dubious metal type (not aluminium) and the screw holes for the chrome headlamp ring are frequently eaten away by rust. In addition, because of the metal type, the bolt thread in the cover through which the cover is held to the leg shield can be in poor condition. Finally, below the horn on the 200cc models there is only a small bit of metal; check it's not cracked or gone. The headlamp cover is the only part of the Bella that is of poor quality and don't expect to do any successful welding on it. Be

especially careful when painting it or the paint will blister over time.
- On the photo, note that the rear body is incorrectly placed over the footboard, not behind it!

The engine

Bella engines are notoriously sturdy. They are one of the last descendants of a long line of ‘DB series’ engines that have proven themselves for decades. Unless they are left open to the air it is very likely that they can be restored. And many engines can be ‘good enough to run’ with a change of oil seals. There are however a few things to be wary of:

- If the engine is seized this doesn’t mean it can’t be restored. As the cylinders are cast-iron, a re-bore is easy and with an oversized piston you’re good to go. However, getting a stuck piston out of the engine needs to be done properly. If you’re lucky the piston is in top position which means you can split the engine after unscrewing the cylinder bolts and lifting it up.
- The flywheel chain stretches over time. At some point it will start to touch the engine casing and will actually cut through it if left unchecked, so it needs to be replaced in time. To test this, put the engine in first gear and move the chain sprocket on the engine back and forth. There should be very little rotational play prior to hitting resistance. If you can turn the sprocket half an inch before the internal flywheel chain tensions, it needs replacing.
- Check that the curburettor is complete. While Bing parts can still be

purchased, they are quite expensive.

Hard to find and expensive parts

There are a few ‘usual suspects’ when it comes to missing parts and some parts are just hard to find or expensive. Check the following:

- The light switch on the handlebars is hard to find replacements for and expensive
- The ignition lock is hard to find, especially in good quality
- The ignition key is hard to source as no new ones are produced and the old stock seems to have gone
- The battery cover at the leg shield is hard to find as is the handle bar shroud for the R 204. Plastic after-market replacements are available however.
- Rear lamp lenses and reflectors are very expensive to replace
- The spark plug cover is hard to find and expensive. It should have a spring to lock it in place and this spring is frequently missing. You can check this by lifting the cover; it should have a resistance and stay in the open position when lifted
- The small metal knobs on the side covers and the spring to hold the covers in place are frequently missing and hard to find
- The original fuel tap is hard to find (frequently there are replacements only operable by opening the side cover); you should be able to use the ignition key to turn the tap from the outside on the rear cover using an extension rod (also frequently missing)
- The rear wheel sprocket is part of the rear drum brake. If the teeth on it are worn, a new ring can be welded onto the drum, but is quite expensive. Factor this into the cost when buying.
- The speedo drive mechanism in the rear wheel is frequently non-functional due to poor installation; replacing it can be hard so if possible, check that the inner Bowden cable of the speedo is turning when moving the rear wheel.

When buying a runner

Should you buy a running machine, there are a few things you can test that are impossible for a basket case. You should at minimum check the following:

- Move the gear shift lever by the footboard up and down and left to right. It should have very little play or your Bella won’t shift gears properly.
- The Bella’s ignition runs off its battery. With a charged battery it will run for about 20 minutes. However, that doesn’t mean the battery is charging when the engine is running. There should be a red indicator light on the dash that is on when the engine is off or at very low revolutions and should go off when just above idle. Test this. If the red light is off continuously it is probably broken and you can test the working of the electrics by checking whether a multimeter shows 7.2V when measuring across pos and neg poles of the battery when the engine is running. It’s an old trick for sellers to just charge the battery prior to a viewing in the hope that a short test drive is all the buyer

wishes to do.
- Check for oil leaks at the seals and under the engine casing. Usually not a sign of huge issues, but oil leaking between the engine halves means splitting the engine to fix it which is a lot of work.
- With an electric starter, ensure the engine turns over at speed when using the starter; if it ‘just about turns over’ the batteries are in poor condition, or the starter coils may be damaged.
- The ignition lock has a clever design. The key itself is part of the electrical circuit. When you put it in the lock it completes the ignition circuit so the engine will run. When you push it down, you complete the starter circuit. To ensure the lock is OK, you should wiggle the key with a running engine (there should be no misfires because of the ignition circuit losing contact) and ensure that when starting the engine, the engine starts while pressing down the key, not only when you release the key. In the latter case the lock needs repair.
- Without shock absorbers the Bella’s ride is a lot worse than with. Ensure that the rear shock absorber has been replaced and that the front one is working properly (it should absorb shock properly and not be bouncy). The front shock absorber in such models that have one (some models have a traditional fork rather than a swing-arm) can be restored, but it’s a tricky job and many restorers don’t want to risk it. If buying a top-quality restored Bella, ask for pictures of it being overhauled or view the parts receipts. It requires a custom oil seal which can’t be readily bought, so ask where they got theirs should an overhaul be claimed.

Frequent Mistakes

No scooter is without problems and even experienced restorers don’t know everything about all models and small things can make a joy to ride into a source of frustration, especially when the symptoms of poor running are vague or hard to pin down. Here are some quick tips for where your seller may have gone wrong:

- The Bella has a points ignition. If you have problems with a warm engine or with poor ignition: ensure that the total resistance between ignition coil and spark plug is max 1 kOhm. So, spark plug caps with max 1 kOhm resistance, **NOT** 5kOhm built in resistors, and no high resistance spark plug leads. This will tax the ignition coil too much. In such a situation, also replace the ignition coil as the insulation will have been damaged which may not be obvious at low temperatures.
- The mechanical regulator can over- or undercharge the battery. In the former case the battery life will be short and, in the latter, you’ll have problems starting. Have it tested if your battery is not optimal or replace it with an electronic regulator (which can be built into the old casing!)
- Over time parts have been mixed up – ensure you have the right carburettor for your model with the right jets installed and the jet needle at the right height. Also ensure the pertinax heat shield between carburettor and cylinder is present. For some models this is a simple ring in the cylinder connection side of the curburettor and for some

models it’s a thick bushing into which the curburettor is mounted and which goes over the cylinder entry point on the other side. If not present, fuel will evaporate at high engine temperatures leading to problems when running.
- Ensure the air hole in your petrol cap is open to prevent the fuel tank creating a vacuum and ensure the tank is clean the fuel tap lets through enough fuel. It is surprising how many issues stem from something simple like fuel supply.
- The electrical start engines have a centrifugal ignition delay – ensure the timing has been set with the delay in the right position.

Final words

All types of scooters and motorcycles have their own peculiarities. The good news is that once a Bella runs well, it’s likely to keep doing that for a long time and it will be quite reliable. If you are keen on maximum reliability you can think of installing an electronic regulator and ignition. While the original ignition is quite reliable, you might want the extra comfort if your Bella is to be a daily runner. It is also a great help to have the spare parts list at hand and the workshop manual for the Bella engine. The latter is required reading prior to overhauling your engine.

Good luck buying and enjoy the ride!

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