

The Used Scooter Inspection Pack

Everything for buying a used Chinese scooter, from the first phone call to the first week of ownership. Five sheets, one print job.

Five sheets, in the order a purchase actually happens. Work through them in sequence — the first one saves you a journey, the second and third decide whether the machine can ever be registered, the fourth is the inspection itself, and the fifth is the week after you hand over the money.

DO THE PAPERWORK BEFORE THE MECHANICALS

This pack puts the numbers and the title before the engine and the brakes, and that is not an accident. A machine you cannot register is worth its parts value however well it runs. Establish that first and you will never again find yourself negotiating hard over a machine you were never going to be able to put on the road.

WHAT IS IN THIS PACK

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Twelve questions and one photo request that decide whether a machine is worth driving across the county to see. | TSP-BU-04 |
| 02 | Where To Find The VIN And Engine Number
A search checklist for the VIN, frame number, engine number and emission label — including the places people look last and should look first. | TSP-ID-02 |
| 03 | VIN Decoder Worksheet
What each of the seventeen characters means under US federal rules, and the two traps that make a motorcycle VIN harder to read than a car one. | TSP-ID-05 |
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| 05 | First Day With A Used Chinese Scooter
What to do in the first hours, before spending money on anything. Most of it costs nothing and all of it saves money later. | TSP-BU-03 |

PRINT THIS AT ACTUAL SIZE

Several sheets in this pack carry scales, rings and bars printed at true size that you lay a part against. Those are only correct if the pack is printed at 100%. In the print dialog choose “Actual size” or “100%”, not “Fit to page”. Each sheet that needs it carries its own millimetre rule — check one with a steel rule before you trust any dimension in the pack.

FREE TO PRINT, COPY AND PASS ON

This pack costs nothing and always will. Print it, photocopy it, hand it to somebody in a club or a forum, leave a copy in a workshop. If you find a mistake in it, tell us and it gets corrected — every sheet carries a document number and a version so you can say exactly which one you mean.

QUESTIONS TO ASK BEFORE YOU TRAVEL

Ten minutes on the phone or in messages, before you commit to a journey. The order is deliberate: the first four are disqualifying, and there is no point asking the rest until they are answered.

1 • PAPERWORK — ASK THESE FIRST

☐ Is there a title, and is it in your name?

"I can get one" is a no

☐ What is the VIN? Can you send a photo of it?

The one thing you can check from home

☐ Does the VIN on the paperwork match the one on the machine?

☐ Is there anything owed on it?

IF ANY OF THOSE FOUR FAIL, STOP HERE

A machine that cannot be registered is worth its parts value and nothing more. That may still be a deal worth doing — but it is a different deal at a different price, and you should know that before you drive anywhere. If the seller will not photograph the VIN at all, walk away.

2 • HISTORY

☐ How long have you had it, and why are you selling?

☐ How many owners before you, as far as you know?

☐ What is the mileage, and does the odometer work?

☐ Has it been off the road, and for how long?

☐ Has it ever been dropped or crashed?

3 • RUNNING

☐ When did it last run, and for how long?

☐ Does it start from cold on the button, first time?

☐ What is not working on it right now?

Ask it openly — most sellers answer honestly

☐ What has been replaced recently?

☐ Is there anything you would fix before riding it far?

4 · THE FOUR PHOTOGRAPHS TO ASK FOR

Each one answers a question you would otherwise drive to find out

ASK FOR

WHAT IT TELLS YOU

The VIN, close and in focus	That it exists, is legible, has not been tampered with, and matches the paperwork
The whole left side of the engine	Oil leaks, a missing CVT cover bolt, a mismatched or replacement engine
Both tyre sidewalls	Tread, cracking, and whether the sizes are the ones the machine should have
The dashboard with the engine running	That it runs, that the odometer works, and what the warning lights are doing

THE RESPONSE MATTERS AS MUCH AS THE PHOTOGRAPHS

A seller who sends four clear photographs within an hour is telling you something about how the machine has been looked after. One who sends three blurry ones taken at night, or who says the phone is broken, is telling you something too. Neither is proof, and both are information you did not have.

5 · BEFORE YOU SET OFF

- ☐ Asked them NOT to warm it up before you arrive
A warm engine hides the cold-start faults that matter most
- ☐ Agreed a time and confirmed it on the day
- ☐ Printed the inspection checklist to take with you
- ☐ Decided your maximum price before leaving, and written it down
- ☐ Told somebody where you are going
- ☐ Arranged to bring somebody with you if paying cash

WHAT YOU WERE TOLD

SELLER NAME

ASKING PRICE

DATE OF CALL

VIN GIVEN

ANYTHING THEY SAID THAT YOU WANT TO CHECK AGAINST THE MACHINE

TAKE THIS WITH YOU

The gap between what you were told on the phone and what you find in the flesh is the most useful single piece of information in a used purchase. You can only see that gap if you wrote down the first half.

WHERE TO FIND THE VIN AND ENGINE NUMBER

Work down the list with a torch. Tick each place as you check it, so that when you get to the end you know whether the number is genuinely missing or you simply have not found it yet.

BEFORE YOU START

You will need a torch, a rag, and something to clean with. Most of these stampings are shallow, filled with paint or road dirt, and sit in shadow. Light held at a low angle across the surface makes a stamping readable when light held straight on does not.

VEHICLE IDENTIFICATION NUMBER — SCOOTERS AND MOPEDS

- ☐ Steering head, front of the frame under the front bodywork
The most common location. Often needs the front panel or legshield removed.
- ☐ Inside the front legshield, behind a small rubber bung or access flap
- ☐ Under the seat, on the frame rail beside or behind the storage bin
Sometimes on a riveted plate rather than stamped
- ☐ Under the floor pan, on the main frame tube
- ☐ On a metal plate riveted to the frame near the steering head
- ☐ On a sticker or barcode label inside the storage bucket
- ☐ Behind the rear bodywork on the frame above the shock mount

VEHICLE IDENTIFICATION NUMBER — ATVS, UTVS AND GO-KARTS

- ☐ Left-hand frame rail near the front A-arm or footwell
- ☐ Under the front bumper on the frame cross-member
- ☐ On the frame beside or under the rear axle housing
- ☐ On a plate riveted inside the wheel arch or under the seat
- ☐ Steering column tube, visible with the front plastics removed

ENGINE NUMBER

- ☐ Left-hand crankcase near the CVT cover
The usual place on a scooter engine
- ☐ Top of the crankcase behind the cylinder barrel
- ☐ Right-hand crankcase below the kickstart shaft
- ☐ On the machined pad next to the oil drain plug
- ☐ Cast into a raised boss rather than stamped flat

EMISSION CONTROL INFORMATION LABEL

This label carries the engine family number, which is the strongest identifier on the machine — it ties the vehicle to a specific federal certificate rather than to a badge. It is the one thing worth removing bodywork for.

- ☐ Inside the under-seat storage bin, on the wall or the floor
- ☐ On the frame under the seat, visible only with the bin removed
- ☐ On the airbox lid or the side of the airbox
- ☐ Inside the legshield, facing rearward
- ☐ On the underside of the seat itself
- ☐ On the frame near the rear shock mount
- ☐ For ATVs and UTVs: under the seat, on the frame near the airbox, or inside a fender

WHEN A NUMBER WILL NOT READ

- Clean the area with degreaser and a rag, then dry it. Paint sitting in a stamping is the usual culprit.
- Hold a torch almost flat against the surface so the light rakes across the characters and throws shadows into them.
- Take a pencil rubbing: hold paper over the stamping and rub the side of a soft pencil across it. This often reads better than your eyes do.
- Photograph it with the flash off and the torch raking. Zoom in on the photograph rather than squinting at the metal.
- Write down the characters you are sure of, and mark the ones you are not with a question mark rather than guessing.

CHARACTERS THAT GET MISREAD

8 and B. 5 and S. 0 and O. 1 and I. 2 and Z. 6 and G. A VIN lookup that returns nothing is far more often a transcription mistake than a machine that is genuinely unrecorded. Before concluding the number is unknown, try the alternatives.

SIGNS A NUMBER HAS BEEN INTERFERED WITH

Uneven character spacing, characters at different depths or angles, a filed or ground area around the stamping, fresh paint over one small patch of frame, or a riveted plate whose rivets look newer than the machine. If you see these on a machine you are considering buying, walk away and do not hand over money. Report it if you have reason to think the vehicle is stolen.

TRANSCRIPTION BLOCK

Copy the numbers here so they leave the garage with you.

VIN

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
world manufacturer						check		year								

ENGINE NUMBER

ENGINE FAMILY NUMBER

FRAME NUMBER IF SEPARATE

DATE CHECKED

LOCATIONS CHECKED WITH NOTHING FOUND

VIN DECODER WORKSHEET

The structure below is federal law, not convention. Everything on this page comes from 49 CFR Part 565 and can be checked against it.

WRITE YOUR VIN HERE, ONE CHARACTER PER BOX

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
world manufacturer									check	year						

WHAT EACH POSITION MEANS

The 17-character VIN as defined for US-market vehicles in 49 CFR 565.15. Character positions count from the left.

POSITIONS	CONTAINS	NOTES
1–3	Manufacturer identifier	Position 1 is the country — L is China, 1, 4 and 5 are the United States. A 9 in position 3 signals a low-volume manufacturer, which changes where the serial number is
4–8	Vehicle attributes	For a motorcycle these must make the make, type, line, engine type and net brake horsepower decipherable
9	Check digit	Required on motorcycles. Values are 0–9 or X
10	Model year	See the warning below — on a motorcycle this character alone cannot fix the year
11	Plant of manufacture	
12–17	Sequential number	Unless a 9 sits in position 3, in which case 12–14 are part of the manufacturer identifier and only 15–17 are the serial

CHARACTERS A VIN CAN NEVER CONTAIN

I, O and Q are excluded from every position of a US VIN, precisely because they are confusable with 1, 0 and 0. If you have read one of those, look again. In the model-year character at position 10, U and Z are excluded as well, and there is no year coded 0.

WHERE THE REGULATION ACTUALLY PUTS THE VIN

WHAT THE REGULATION ACTUALLY REQUIRES, AND WHAT IT DOES NOT

49 CFR 565.13(e) requires only that the VIN appear clearly and indelibly on a part not designed to be removed except for repair, or on a permanently affixed plate. It does not name the steering head, and the well-known readability rule — visible without moving any part, 4mm characters — applies to cars and light trucks, not to motorcycles. Separately, 49 CFR 567.4(e) requires the certification label, which carries the VIN, to be as close as practicable to where the steering post meets the handlebars. That is where the steering-head belief comes from, and it is about the label rather than the stamping.

THE MODEL YEAR CHARACTER

Model-year character at position 10. The cycle repeats every thirty years, so each character has two possible years.

CHAR	YEAR	CHAR	YEAR	CHAR	YEAR
A	1980 / 2010	L	1990 / 2020	Y	2000 / 2030
B	1981 / 2011	M	1991 / 2021	1	2001 / 2031
C	1982 / 2012	N	1992 / 2022	2	2002 / 2032
D	1983 / 2013	P	1993 / 2023	3	2003 / 2033
E	1984 / 2014	R	1994 / 2024	4	2004 / 2034
F	1985 / 2015	S	1995 / 2025	5	2005 / 2035
G	1986 / 2016	T	1996 / 2026	6	2006 / 2036
H	1987 / 2017	V	1997 / 2027	7	2007 / 2037
J	1988 / 2018	W	1998 / 2028	8	2008 / 2038
K	1989 / 2019	X	1999 / 2029	9	2009 / 2039

ON A MOTORCYCLE, POSITION 10 CANNOT TELL YOU THE YEAR ON ITS OWN

The model-year character repeats on a thirty-year cycle: T is 1996 and T is also 2026. For cars and light trucks the regulation adds a tie-breaker in position 7, but that rule does not extend to motorcycles, so there is no federal way to resolve the ambiguity from the VIN alone. Confirm the year from the month and year of manufacture on the certification label, or from the title. A machine built before the 1981 model year may carry no standardised VIN at all.

YOUR DECODE

POSITIONS 1–3 Country and manufacturer identifier	POSITION 1 COUNTRY L is China, 1/4/5 are the US	IS POSITION 3 A 9? If yes, the serial moves to 15–17
POSITION 9 CHECK DIGIT	POSITION 10 CHARACTER	TWO POSSIBLE YEARS From the table above
POSITION 11 PLANT	SERIAL NUMBER	YEAR CONFIRMED FROM Label or title — not the VIN

ANYTHING THAT DID NOT FIT THE PATTERN

IF IT DOES NOT DECODE

Three different things produce a VIN that will not read. A transcription mistake is by far the commonest — try the alternatives for 8/B, 5/S, 0/O and 1/I. A machine built before the 1981 model year predates the standardised seventeen-character format entirely. And some imported machines carry numbers that simply do not conform. None of those is the same as the machine being unrecorded.

USED CHINESE SCOOTER INSPECTION CHECKLIST

DO THIS SECTION FIRST. IF IT FAILS, WALK AWAY.

A machine you cannot register is worth its scrap value however well it runs. Numbers and paperwork before mechanics, every time.

1 • NUMBERS AND PAPERWORK

- ☐ VIN found on the machine and written down in full _____
- ☐ VIN on the machine matches the VIN on the title exactly _____
Character by character, not at a glance
- ☐ Title or registration document present, in the seller's name _____
- ☐ Engine number found and recorded _____
- ☐ Emission label present and legible _____
- ☐ No sign of grinding, filing or restamping around any number _____
- ☐ Seller can explain any mismatch, and the explanation is checkable _____

STOP SIGNS

No title and no explanation. A VIN that is 16 characters when it should be 17. Numbers that have been ground off or restamped. A seller who will not let you photograph the VIN. Any of these, walk away — and if you believe a vehicle is stolen, report it rather than negotiating over it.

2 • COLD START — YOU ONLY GET ONE CHANCE

- ☐ Engine is genuinely cold when you arrive
Put a hand on the cylinder before the seller reaches for the key
- ☐ Starts on the button without excessive cranking
- ☐ Kickstart works too, if fitted
- ☐ Idles without needing the throttle held
- ☐ No blue smoke after the first few seconds
Oil
- ☐ No white smoke that persists once warm
Coolant, on a liquid-cooled engine
- ☐ No rattling, knocking or ticking that changes with revs
- ☐ No fuel smell or visible leak

3 • ENGINE AND DRIVETRAIN

- ☐ Oil level correct and the oil is not black sludge or milky
- ☐ No oil weeping from the case joints or the base of the cylinder
- ☐ Exhaust is solid, not blowing at the flange
- ☐ CVT engages smoothly rather than snatching
- ☐ No belt squeal or judder pulling away
- ☐ Air filter present and not soaked in oil
- ☐ Coolant level and colour, if liquid cooled

4 • BRAKES, TYRES AND WHEELS

- ☐ Front brake firm, not spongy, and does not pull to the bars
- ☐ Rear brake works and is adjustable
- ☐ Pads or shoes have visible material left
- ☐ Discs not scored or lipped
- ☐ Tyres have tread and no sidewall cracking
- ☐ Tyre date codes are not ancient
- ☐ No play in the wheel bearings when rocked
- ☐ Wheels true, no dents in the rims

5 • CHASSIS AND ELECTRICS

- ☐ Forks do not weep oil and are not pitted
- ☐ Rear shock is not leaking
- ☐ Steering turns lock to lock without notchiness
- ☐ No cracks or amateur welding on the frame
- ☐ Bodywork mounts intact, panels not held on with tape
- ☐ All lights, indicators, brake light and horn work
- ☐ Speedometer and odometer work
- ☐ Battery holds charge — restart it after the test ride
- ☐ Ignition and steering lock both work with the key supplied
- ☐ Two keys, ideally

6 • TEST RIDE

- ☐ Pulls away without hesitation

- ☐ Reaches a sensible speed for its size without flat spots
- ☐ No surging or cutting out at steady throttle
- ☐ Runs straight with hands lightly on the bars
- ☐ No vibration through the bars or floor that changes with speed
- ☐ Restarts hot

DECISION

ASKING PRICE

WHAT IT NEEDS

WHAT YOU OFFERED

DATE SEEN

NOTES

FIRST DAY WITH A USED CHINESE SCOOTER

An hour on day one is worth a weekend later. Work down in order — the sections are deliberately in the order that saves the most money.

1 · RECORD WHAT IT IS, BEFORE ANYTHING ELSE

- ☐ VIN found, written down and photographed
- ☐ Engine number found, written down and photographed
- ☐ Emission label found and photographed flat on
- ☐ Machine looked up and the factory noted
- ☐ All of the above saved somewhere that is not just your phone
- ☐ Belt marking, roller size and plug type recorded before they are changed

DO IT NOW, NOT LATER

Every one of these numbers is under a panel. On day one you are already taking panels off out of curiosity. In three months, when you actually need the number, you will not be.

2 · SAFETY BEFORE THE FIRST REAL RIDE

- ☐ Both brakes work and are properly adjusted
- ☐ Tyres have tread, hold pressure and are not cracked or ancient
- ☐ Lights, brake light, indicators and horn all work
- ☐ Nothing is loose — axle nuts, handlebar clamp, engine mounts, exhaust
- ☐ Throttle returns fully on its own when released
- ☐ Steering does not bind or catch
- ☐ No fuel leaks anywhere
- ☐ Mirrors fitted and pointing at something useful

3 · CONSUMABLES WORTH DOING ON AN UNKNOWN MACHINE

On a machine whose history you do not know, assume none of this has been done. It is all cheap and it all removes a variable if something goes wrong later.

- ☐ Engine oil and, if separate, gearbox oil
- ☐ Air filter — check it, clean or replace
- ☐ Spark plug — record the old one before binning it
- ☐ Drive belt — inspect, and record the marking
- ☐ Brake fluid, if hydraulic and the fluid is dark
- ☐ Coolant, if liquid cooled
- ☐ Tyre pressures set correctly
- ☐ Every accessible fastener checked for tightness

WHAT NOT TO SPEND MONEY ON YET

Not a performance variator, not a big-bore kit, not a loud exhaust, and not a new CDI. None of them fix a machine that has not yet been serviced, and all of them make diagnosing the next problem harder. Get it running properly on standard parts first. Then, if you still want to change something, you will have a baseline to compare against.

THE RECORD

BOUGHT ON

BOUGHT FROM

PRICE PAID

ODOMETER AT PURCHASE

VIN

ENGINE NUMBER

FACTORY

WHAT IT NEEDS, IN THE ORDER YOU INTEND TO DO IT

Need to work out what you actually own?

The Scooter Parts Registry is a free public record of the Chinese factories behind US-market scooters, ATVs and go-karts — brand, engine family, VIN prefix, factory and related machines. No account, no email.

thescooterparts.com/identify