Aprilia Tuareg 660 · Travel manual

Travel edition · A4 sheets · For the road: data, roadside procedures and fault finding. Trip preparation, the packlist and the bike record are in the home edition.

For the 2022+ Tuareg 660. Sources appear once, in the data tables: **OM** = owner's manual page, **WS** = workshop manual page, **3P** = third-party, not in the Aprilia manuals (verify). Procedures follow the Aprilia manuals; where Aprilia gives none (tyre plug, chain link, jump start) they follow standard motorcycle practice.

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1 Data

Tyres & wheels

	Front	Rear	Src
Tyre	**90/90-21 M/C 54V**	**150/70 R18 M/C 70V**	OM 182
Permitted alternative (max 170 km/h)	90/90-21 54R M+S	150/70-18 70R M+S	OM 182
Rim (spoked, tubeless)	2.15 × 21"	4.25 × 18"	OM 182
Pressure cold · solo	**2.0 bar · 29 psi**	**2.5 bar · 36 psi**	OM 182
Pressure cold · 2-up	**2.2 bar · 32 psi**	**2.7 bar · 39 psi**	OM 182
Pressure cold · off-road	**2.0 bar · 29 psi**	**2.0 bar · 29 psi**	OM 183
Min. tread	2 mm, or the local legal minimum		OM 142
Puncture limit	Replace the tyre if the hole in the tread is larger than 5 mm		OM 141
Rim runout max.	0.8 mm radial and axial		WS 169

Fluids & capacities

Fluid	Spec	Qty	Src
Engine oil	**SAE 10W-50 synthetic, API SL, JASO MA2**	**2.3 L**[1]	OM 178, 191
Coolant	Ready-mixed red ethylene-glycol antifreeze, organic inhibitors (OAT)	2.0 ± 0.2 L	OM 178, 191
Brake fluid	**DOT 4**	—	OM 191
Fuel	Unleaded 95 RON, max E10	18 L, reserve 2.7	OM 108
Chain lube	Spray lube safe for sealed (O-ring) chains	—	OM 174
Fork oil	SAE 7.5W	—	OM 191
Grease	Lithium-calcium, EP, water-repellent	—	OM 191

[1] Oil change including filter. The workshop procedure says 2.7 L (WS 40), apparently copied from the RS 660. Fill 2.3 L, then top up to MAX on the dipstick.

Torques & tool sizes

Fastener	Nm	Tool	Src
Front axle	**65**	17 mm hex	WS 8 · tool 3P
Front axle pinch screws ×2	**10**	5 mm hex or 10 mm²	WS 9 · tool 3P
Front caliper screws M10 ×4	**50**	13 mm	WS 9 · tool 3P
Rear axle nut M20×1.5	**120**	26 mm	3P
Chain adjuster lock nut / bolt	—	10 + 13 mm	3P
Oil drain plug, new washer	**20**	—	3P
Mirror bases	50	—	WS 11
Handguard screws	4	—	WS 10
Anything else: M5 · M6 · M8 · M10 · M12	5.5 · 9.5 · 25 · 50 · 80	—	WS 27

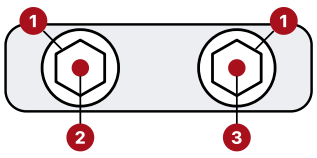
[2] The aftermarket tool kits disagree; check your bike. Screws with pre-applied threadlocker must be replaced once loosened (WS 28).

Limits, settings & parts

Item	Value	Src
Chain slack	**≈ 48 mm total, 320 mm in front of the rear axle, side stand**	OM 172
Chain	Regina 520 ZRA, 120 links, riveted master link · sprockets 15/42	OM 179
Chain wear, 8 pitches taut	new 127.0 mm · **replace at ≥ 130.8 mm** (3 %)	WS 201 · mm calc.
Brake pads	**Replace at ≈ 1.5 mm** friction material, all pads on that axle	OM 165
Brake disc min. thickness	front 4.0 mm · rear 4.5 mm	WS 245, 247
Rear pedal free play	1.5 mm	WS 54
Idle speed	1400 ± 100 rpm	OM 176
Battery	BS BSLi-04 lithium, 12 V 48 Wh · alternative Yuasa YT12A-BS lead-acid	OM 183
Charging voltage	Never above 15 V	WS 117
Spark plug	NGK IR MR9DI-7, gap 0.7-0.8 mm	OM 183
Oil filter	OEM 857187 · Hiflofiltro HF138	3P
Due on the road	Oil + filter 10 000 km / 12 months · chain check 1000 km · off-road: halve chain and air filter	OM 188

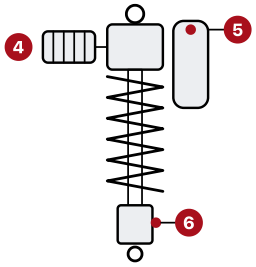
Suspension settings

Fork caps
seen from the rider's seat



Clockwise = closed
harder damping, more preload

Rear shock
seen from behind

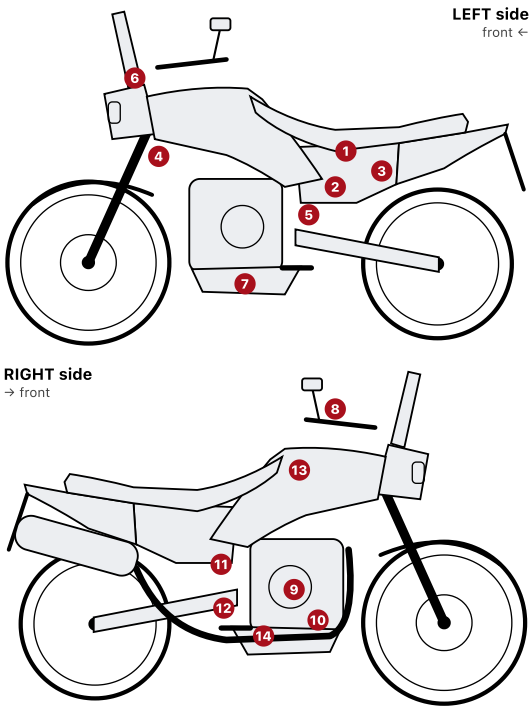


bike's left ← → right

#	Adjuster	Solo	Loaded
1	Fork preload, nut on both legs (set equal)	**6 mm out**	**7 mm out**
2	Fork compression, left cap	**8 clicks out**	**3 clicks out**
3	Fork rebound, right cap	**8 clicks out**	**7 clicks out**
4	Shock preload knob, left	**10 clicks in from fully open**	**26 clicks in**
5	Shock compression, reservoir, right	**2 turns out**	**2 turns out**
6	Shock rebound, bottom of shock, right	**1.5 turns out**	**1 turn out**

OM 110-116 · "out" = counted from fully clockwise (closed) · loaded = passenger and/or luggage

Where things are



Positions approximate. Numbers match the table.

#	What	Where · access	Src
1	Battery, auxiliary fuses	Under the rider seat. Passenger seat off first, then rider seat; battery cover 2 screws	OM 21, 149, 155
2	Main fuse 30 A + spare	Behind the left side panel: 4 screws, unhook the front, unplug the connector	OM 21, 158
3	Seat lock	Ignition key clockwise; press the seat's middle-rear, lift and slide back	OM 22, 98
4	Coolant expansion tank	Left side, under the steering head	OM 144
5	Shock preload knob	Left side, top of the shock	OM 111
6	USB socket 5 V, 1 A	Left of the dash	OM 99
7	Sump guard	Under the engine: 2 front screws, then 2 rear	OM 22 · WS 292
8	Front brake reservoir	Right handlebar; cover 2 screws	OM 22, 146
9	Oil filler cap + dipstick	Right side of the engine	OM 22
10	Oil filter	Right side, front of the engine, low	OM 22
11	Rear brake reservoir · shock compression adjuster	Right side, next to the shock; reservoir screw cap	OM 22, 111, 147
12	Shock rebound adjuster	Right side, bottom of the shock at the linkage	OM 112
13	Air filter	Under the fuel-tank upper cover; airbox cover 4 screws	OM 22 · WS 41
14	Rear brake pedal	Free-play adjuster behind the right frame cover	OM 22 · WS 54
	Clutch cable in-line adjuster	Right side of the bike	WS 55
	Frame / engine number	Frame crossbar under the seat / rear of the crankcase near the shock	OM 100

2 Daily check

- ☐ **Tyres:** pressure (cold), cuts, embedded objects, tread.
- ☐ **Spokes:** tap each with a screwdriver. Even ring = OK; a dull note = loose.
- ☐ **Brakes:** lever and pedal feel, fluid level, pads, leaks.
- ☐ **Oil** level (warm, upright) · **coolant** level (cold).
- ☐ **Chain:** slack, lube, no tight spots.
- ☐ **Throttle** snaps back · **clutch** free play, cable not frayed.
- ☐ **Steering** free lock to lock, no play, no notches.
- ☐ **Side stand** springs back; the engine cuts if you select a gear with it down.
- ☐ **Fasteners:** axles, calipers, racks, sump guard, mirrors.
- ☐ **Lights, horn, indicators, brake light**; warning LEDs light for 3 s at key-ON.
- ☐ **ABS tone wheels** clean (mud causes ABS/ATC faults) · **fuel**, cap locked.

Dust or off-road: check the air filter every few days and the chain daily.

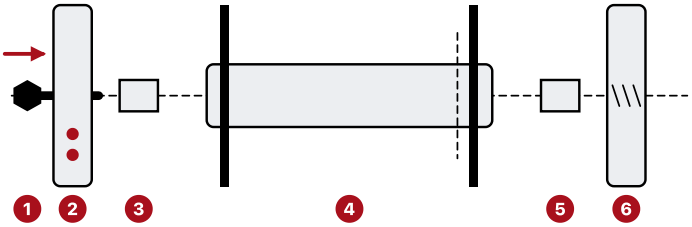
3 Tyres & wheels

Tubeless puncture plug

1. Find the leak (soapy water), mark it, pull the object out.
2. Ream the hole, several strokes.
3. Load a string plug in the needle (cement if supplied). Push in until ⅓ is left outside, pull the needle straight out.
4. Trim to about 5 mm, inflate, leak-test.
5. Ride gently and keep checking the pressure. A plug gets you home: have the tyre repaired properly or replaced.

Front wheel out & in

exploded · seen from behind, rider's left on the left

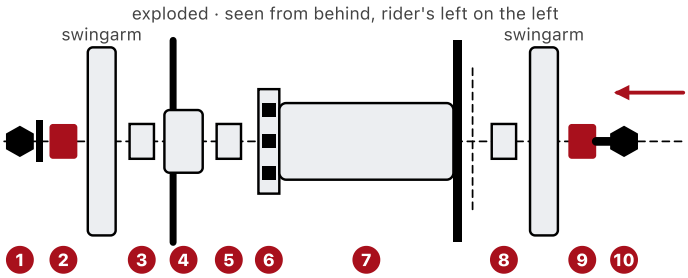


1. Axle, 17 mm hex: in and out on the left
2. Left fork leg: pinch clamp, 2 screws
3. Left spacer
4. Hub, a disc each side; ABS tone ring on the right
5. Right spacer
6. Right fork leg: the axle threads in here

1. Lift the front wheel: jack under the sump guard, bike strapped so it can't tip.
2. Remove both calipers (2 screws each) and hang them up. Don't pull the brake lever while they are off.
3. Loosen the 2 pinch screws (2), unscrew the axle (1) and pull it out to the left.
4. Take the wheel out. The spacers (3, 5) come loose: keep each with its side.
5. Refit: wheel with both spacers, axle from the left. Tighten the **axle to 65 Nm** first, then the **pinch screws to 10 Nm**.
6. Calipers **50 Nm**. Pump the lever until firm, spin the wheel.

Rear wheel out & in

exploded · seen from behind, rider's left on the left



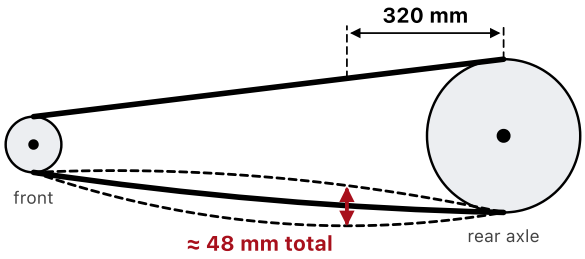
1. Nut 26 mm + washer
2. Left adjuster block
3. Outer spacer, in the sprocket carrier
4. Sprocket carrier + sprocket (comes out with the wheel)
5. Inner spacer, between carrier and hub flange
6. Cush rubbers in the hub flange
7. Hub; disc and ABS tone ring on the right
8. Right spacer
9. Right adjuster block
10. Axle: in and out on the right

1. Rear stand, or the sump guard on a solid block so the wheel hangs free.
2. Both sides: loosen the adjuster lock nuts and back the adjusters off.
3. Remove the axle nut and washer (1).

4. Support the wheel and pull the axle (10) out to the right; the adjuster blocks (2, 9) come free.
5. Push the wheel forward, lift the chain off the sprocket and roll the wheel out; the disc slides out of the caliper. Don't press the brake pedal while the wheel is out. Keep the loose spacers (3, 5, 8) with the wheel.
6. Refit: cush rubbers (6), inner spacer (5), carrier (4) and both outer spacers (3, 8) in place. Wheel in, disc between the caliper pads, chain on.
7. Axle in from the right with the right adjuster block; then the left block, washer and nut, finger-tight.
8. Set the chain slack (next chapter), tighten the lock nuts, then the **axle nut to 120 Nm**.
9. Pump the brake pedal, spin the wheel, recheck the slack.

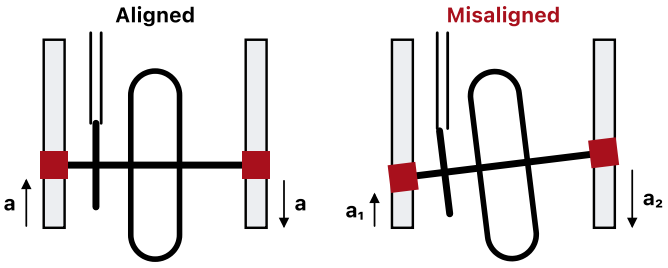
4 Drive chain

Check slack



1. Engine off, side stand, neutral.
2. At 320 mm in front of the rear axle, push the bottom run up, then pull it down. Total travel ≈ 48 mm.
3. Roll the bike and repeat at several points. If the slack varies, links are kinked or seized: replace the chain.

Adjust



Seen from above, front at the top. a = adjuster block to the rear end of the swingarm.

1. Rear stand. Loosen the axle nut, then the lock nuts on both sides.
2. Turn both adjuster bolts by the same amount. Keep the marks level on both sides and measure that the block-to-swingarm-end distance is the same left and right.
3. Tighten both lock nuts, then the **axle nut to 120 Nm**.
4. Recheck on the side stand. Never set it tighter than spec: the chain tightens as the suspension compresses.

Clean, lube, repair

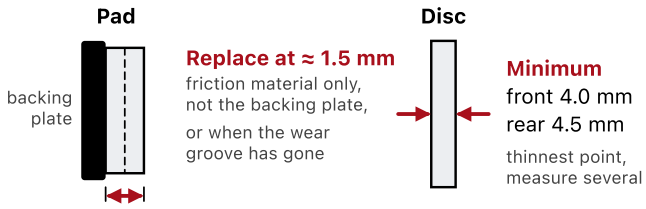
- **Clean & lube:** light water jet, chain cleaner (no petrol or harsh solvents: they kill the O-rings), let it dry, spray the inside of the lower run, let it set. After every wash and after rain.
- **Worn** (limit in the Data table), damaged rollers, loose pins, missing O-rings or hooked teeth: replace chain and both sprockets together.
- **Broken chain:** fit a 520 master link (a clip link gets you home, a rivet link is permanent) with a chain breaker/riveter. Don't over-press the side plate; the link must move freely.

5 Brakes

Fluid level & top-up

- **Front:** turn the bars until the reservoir is level and read the sight glass. Top up: 2 screws, cover, gasket.
- **Rear:** bike upright; screw cap and gasket off; top up with a syringe to between MIN and MAX.
- With worn pads, top up only to just above MIN, or it will overflow when new pads push the pistons back.
- DOT 4 absorbs water and strips paint: close it quickly, cover nearby paint. A slow fall is pad wear; a sudden drop is a leak.

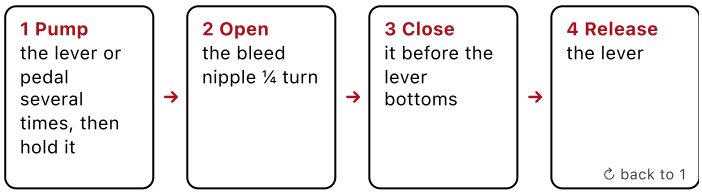
Pads



1. Pull the split pin, slide out the pad pin, take out the pads.
2. Don't touch the lever or pedal while the pads are out.
3. Clean the pistons and push them back gently; watch the reservoir level.
4. New pads, pad pin, new split pin. Pump until firm **before riding**.
5. Brake gently for the first ~100 km to bed them in.

Front: always replace the pads in both calipers together.

Bleeding



- Bike level, clear hose from the nipple into a bottle. Keep the reservoir above MIN the whole time.
- Repeat until no bubbles come out. Front: bleed both calipers. Then top up and refit the caps.
- Still spongy: air is trapped in the ABS unit, which needs the dealer's diagnostic tool.

Lever & pedal

- **Front lever reach:** push the lever forward and turn the adjuster; anticlockwise brings it closer.
- **Rear pedal free play:** remove the right frame cover, loosen the lock nut, turn the pushrod pin, re-lock.

6 Oil, coolant, air filter

Oil level

1. Engine warm from about 15 km of riding (not idling). Switch off and wait a few seconds.
2. Level ground, bike upright on both wheels, not on the side stand.
3. Unscrew the dipstick, wipe it, put it back **without screwing it in**, pull it out and read.
4. Aim for about MAX. Never below MIN or above MAX. Top up only with the specified oil.

Oil & filter change

1. Warm engine. Remove the sump guard (2 front screws, then 2 rear while supporting it).
2. Container of at least 3 L underneath. Drain plug out, then the filler cap; let it drain for several minutes.
3. Unscrew the old filter. Oil the new filter's seal, pre-fill it about ⅓, screw it in by hand.
4. Drain plug with a new aluminium washer, **20 Nm**.
5. Fill **2.3 L**, run the engine a few minutes, switch off, wait 30 s, top up to MAX.
6. Check the plug and filter for leaks, refit the sump guard.

Coolant

- Check **cold**, bike upright: the level must be between MIN and MAX. Don't ride below MIN.
- Top up through the expansion tank cap to halfway between MIN and MAX.
- **Never open it hot**: the system is pressurised.

- No coolant to hand: clean water gets you to a workshop. Replace it with the correct mix soon, especially if frost is possible.

Air filter (dust)

Remove the fuel-tank upper cover and the 4 airbox cover screws, lift out the filter. It is paper: tap it out gently from the clean side; never wash or oil it. Replace it if it stays clogged.

7 Battery, fuses, lights

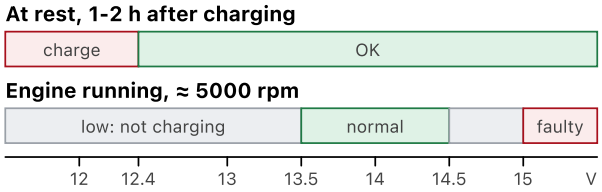
Battery

- **Remove:** key OFF, seats off, cover off. Disconnect **– first**, then +. Refit **+ first**, then –, with a little grease on the terminals.
- **TEST button** on the battery: 5-6 bars ready · 3-4 charge recommended · 1-2 charge needed · 0 faulty.
- **Cold:** the lithium battery works from 0 to 40 °C. Below 0 °C, make short repeated start attempts; each one warms it. For long use outside that range fit the lead-acid alternative.

Charging	Normal	Quick
Lithium (standard)	2.0 A · 2 h	8 A · 0.5 h
Lead-acid (alternative)	1.0 A · 8-10 h	10 A · 1 h

OM 152-153

Use a lithium charger, or a plain 12 V charger with **no desulphation or pulse mode**, never above 15 V. Stop if the battery gets warm.

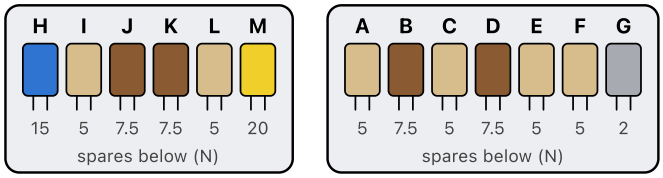


Jump start: donor car's engine **off**. + to +, then – to bare metal on the engine or frame. Start, disconnect in reverse order. Never use a booster above 15 V.

Fuses

Key OFF. Check the smallest ratings first and the main fuse last. Replace only with the same rating, and find the cause: a fuse that blows again means a short. Pulling the main fuse resets the clock and trip.

Under the rider seat · rating in A



Colours follow the standard blade-fuse code. The box with the blue 15 A and yellow 20 A fuses is H-M. Main fuse O (30 A) is separate, behind the left side panel.

Fuse	A	Circuit
A	5	Running lights, number-plate light, horn
B	7.5	Instrument panel, indicators, heated grips
C	5	Key-on: ECU, ABS, dash, left switches, **starter relay**
D	7.5	ECU permanent feed
E	5	Key-on: AMP, OBD, anti-theft
F	5	Headlamp
G	2	USB socket
H	15	**Engine:** fan relay, ECU, fuel pump relay, lambda, injectors, coils, air valve
I	5	Anti-theft provision, OBD
J / K	7.5	Right / left radiator fan
L	5	Fog lights (if fitted)
M	20	ABS
O	30	**Main:** battery charging, everything

OM 156-159 · A-M under the rider seat, O behind the left side panel

Lights & headlight aim

All lights are LED: no bulbs to carry, a failed module means a new unit.

Aim (after loading luggage): bike 10 m from a wall on level ground, rider seated, low beam on. The cut-off should sit at 0.9 × the headlight's height above the ground: headlight at 90 cm → cut-off at 81 cm.

Low beam: two adjusters behind the fairing (left and right), **clockwise lowers**. High beam: Phillips screw underneath, **clockwise raises**.

8 Suspension & clutch

Adjusting the suspension

Settings and adjuster positions: see Suspension settings in the Data chapter. Turn each adjuster fully clockwise first, then count out. Never force an adjuster past its stop, set both fork legs the same, and add rebound damping when you add preload.

Clutch

Adjust if it slips, drags (the bike creeps or stalls in gear) or bites too late.

- **Fine:** the adjuster at the lever; clockwise increases free play.
- **Coarse:** the in-line adjuster on the right side; loosen the nut, turn, re-lock.
- **Test:** engine running, 1st gear, clutch pulled: no creep, no stall. No slip under acceleration.

9 Fault finding

Won't start

Dash lights at key-ON?	**No →** battery terminals · TEST button · main fuse O · key
yes ↓	
Starter turns?	**No →** kill switch at RUN · neutral, or clutch pulled with the stand up · brake held · side-stand switch (its pin must sit in the stand's hole) · fuse C · battery charge
yes ↓	
Engine fires?	**No →** fuel · fuel pump buzzes at key-ON? If not, fuse H · immobilizer asking for the user code · cold lithium battery: short repeated attempts
yes ↓	
Dies when you select a gear?	**Yes →** side stand still down, or its switch is faulty

Dashboard alarms

Message	Action
ALARM OIL PRESSURE, flashing	**Stop the engine now.** Check the oil level; don't ride on.
ALARM OIL SENSOR, steady	Sensor fault. Check the level; dealer soon.
Temperature flashing	Overheating (115 °C): stop, cool down, see Other faults.
ALARM URGENT SERVICE, fast flash	Limp mode (less torque, fixed idle, or about 3000 rpm). Ride gently to a dealer.
ALARM SERVICE	Stored fault; dealer when practical.
ALARM CAN ECU DISCONNECTED	Hazards flash until you signal right. Pull over; check fuses C and D.
ALARM CAN BUS OFF / CAN HLU	Wiring fault (HLU = headlamp). Ride carefully to a dealer.
ATC alarm	Traction control off. Clean the tone wheels and sensors.
BRAKE STUCK	A brake has been on for over 30 s: foot on the pedal, or a sticking lever or pedal.
Code request	Immobilizer fault: enter your 5-digit user code to start.

OM 33-37, 97

Other faults

Symptom	Check
Overheating	Coolant level (cold) · both fans running, else fuses J/K, H · radiator blocked with mud: rinse from behind, low pressure
Battery warning	Terminals tight and clean · measure the voltage (scale under Battery)
ABS / ATC light after mud	Clean tone wheels and sensors, cycle the ignition. If it stays on, ABS is off: brake gently.
Spongy brake	Fluid level, leaks, then bleed. After a long descent: let it cool, use engine braking.
Clutch slips or drags	Adjust free play; cable frayed or kinked?
Vibration, weave	Tyre pressure, loose spokes, axles, chain tight spots, wheel bearings, steering-head play, luggage too high or too far back
No lights or horn	Fuses A, F, B

After a drop

- Fuel and oil leaks · levers, pedals and pegs (bend back slowly) · bar alignment.
- Side-stand switch and spring · radiator and hoses · mirror and handguard bolts.
- Stand it upright a minute or two before restarting, then check the oil level.
- **Recovery:** transport upright, strapped, in 1st gear, mirrors folded. Aprilia advises against towing.