

Keurig Complete Service Guide

All repairs, specifications, maintenance procedures, and fault diagnosis for the Keurig K-Elite, K-Supreme, K-Duo, and K-Mini. Field-measured data — not from Keurig documentation.

MODEL SPECIFICATIONS

Model	Entry System	Bore	Reservoir	Key Difference
K-Elite	Single needle	1.2mm ID	75 oz removable	Float sensor; firmware descale counter
K-Supreme	MultiStream ×5	0.8mm ID ea.	66 oz removable	Bayonet disc; harder to clean
K-Supreme Plus	MultiStream ×5	0.8mm ID ea.	78 oz removable	Wi-Fi 2.4GHz only (MQTT over TLS)
K-Duo	Single (pod side)	1.2mm ID	60 oz shared	Dual solenoid; carafe side separate
K-Mini	Single needle	1.2mm ID	Fixed top-fill	Pressure transducer (no float)
K-Cafe	Single needle	1.2mm ID	60 oz removable	Magnetic frother coupling

NEEDLE SPECIFICATIONS (ALL MODELS)

CRITICAL: Entry needle: 1.2mm ID for K-Elite/Duo/Mini/Cafe. 0.8mm ID per port for K-Supreme MultiStream. Exit needle: 1.2mm ID, 7° off-center on all models. Cleaning tool: 0.9mm wire (paperclip) for 1.2mm bores; 0.7mm wire (twist-tie) for 0.8mm MultiStream ports. NEVER use a pin, toothpick, or tool larger than 0.9mm in any Keurig needle.

REPAIR 01 — K-ELITE DESCALE SENSOR COUNTER RESET

Note: The K-Elite descale indicator is a brew-cycle counter (~250 cycles), not a scale sensor. It fires regardless of water hardness and requires a specific reset sequence after descaling. This sequence is NOT in Keurig documentation.

- 1 Complete full descaling cycle (citric acid 2g/100ml). Run cycle to completion — do NOT interrupt.
- 2 Run two complete 12 oz water-only flush cycles. Full tanks, not partial.
- 3 With machine ON and showing Ready: press and hold the 8 oz AND 12 oz buttons simultaneously for 5 seconds.
- 4 Machine will pulse the pump briefly. Descale light extinguishes. Release buttons.
- 5 Confirm with a 12 oz water-only cycle — machine should complete in under 90 seconds.

REPAIR 02 — NEEDLE CLEARING (ALL MODELS)

SAFETY: Sharp hazard — always unplug before accessing needles.

K-Elite / K-Duo / K-Mini (single 1.2mm needle):

- 1 Unplug machine. Open brew head. Straighten paperclip (0.9mm wire).
- 2 Entry needle (top, points down): insert wire from above, rotate circular motion 8mm deep. Flush with water.
- 3 Exit needle: remove K-Cup holder (press tabs, pull down). Invert. Insert wire from open end — rotate circular motion — 7° offset bore requires full 360° rotation to clear inner wall. Flush under tap.
- 4 Reassemble. Run 10 oz water-only cycle. Flow should start within 15 seconds.

K-Supreme / K-Supreme Plus (MultiStream 5×0.8mm):

- 1 MultiStream disc is removable — grasp disc, rotate 30° counterclockwise, pull straight down.
- 2 Soak in citric acid 2g/100ml warm water for 15 minutes.
- 3 Clear each of the 5 ports with 0.7mm wire (twist-tie). Confirm all 5 open by backlighting.
- 4 Reinstall: insert disc, rotate 30° clockwise until locked. Run 2 water-only cycles.

REPAIR 03 — SHORT FILL DIAGNOSIS

Symptom	Root Cause	Fix
Short fill all sizes, water-only also short	Float magnet stuck or scaled sensor	Remove/clean reservoir; wipe magnetic sensor post
Short fill K-Cup only; water-only normal	Air lock at 90° elbow fitting	Air-purge: run 12 oz water-only twice before K-Cup
Short fill worsens over months	Scale in flow meter turbine	Full descaling cycle at 2.5g/100ml
K-Mini short fill despite full reservoir	Pressure transducer membrane scaled	Citric acid soak 15 min before running cycle

REPAIR 04 — PUMP CAVITATION (LOUD GRINDING)

- 1 Remove reservoir. Clean base outlet valve (silicone plug) with damp cloth. Clean intake port on machine body.
- 2 Reseat reservoir: align rear edge flush, press FORWARD and DOWN simultaneously — forward motion engages outlet valve. Coupling uses 800g-pull rare earth magnets; feels "almost seated" when offset 3–5mm.
- 3 Fill to MAX. Run 12 oz water-only cycle — air clears in first 10 seconds if cavitation was the cause.
- 4 If grinding persists after reseating: scale on pump inlet. Run full descaling cycle. If still present after descaling: pump bearing wear — K-Elite pump is ULKA-compatible, replacement ~\$25.

DESCALING QUICK REFERENCE

Model	Concentration	Mode Entry	Flush Cycles	Notes
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K-Elite	2g/100ml	8oz+10oz hold 3sec	2 full tanks	Button reset required after — see Repair 01
K-Supreme	2g/100ml	Standard brew mode	2 full tanks	MultiStream disc soak separately
K-Supreme Plus	2g/100ml	Standard brew mode	2 full tanks	Remove filter cartridge first
K-Duo	2g/100ml	Standard brew mode	2 full tanks	Run both sides: pod and carafe
K-Mini	2g/100ml	Standard brew cycles	2×500ml	No descale mode — manual cycles only

FAULT DIAGNOSIS QUICK REFERENCE

Symptom	Likely Cause	First Action
Descal light on after descaling	Counter not reset (K-Elite)	8oz+12oz button hold — Repair 01
No output, pump silent	Power or control board	Unplug 5 min; check outlet
No output, pump running	Needle clog or air lock	Clear needle — Repair 02
Output low / short fill	Float sensor or air lock	Repair 03 diagnosis tree
Loud grinding / rattle	Pump cavitation	Reseat reservoir — Repair 04
K-Supreme slow flow	MultiStream clog	Remove and soak MultiStream disc
K-Duo carafe side no output	Carafe solenoid scale	Targeted descale — carafe side only
K-Duo carafe basket sensor error	Contact fouling	Clean metal contacts with dry cloth
K-Mini add water with full tank	Pressure transducer scaled	15-min citric acid soak before cycle
K-Cafe frother not spinning	Base contact fouling	Vinegar swab on 4 contact pins
Wi-Fi brew fails (K-Supreme Plus)	2.4GHz conflict or stale session	Force-close app; assign DHCP reservation