

Brakes

CEMOTO D-series bikes use **hydraulic disc brakes** (dual-disc on the 72V models); eBikes use hydraulic or mechanical disc brakes depending on model. This page covers brake symptoms, adjustment and the brake error code.

Related error codes

Code	Meaning
E02	Brake Error

Full definition: [Display & Error Codes](#).

How CEMOTO brakes work

The brake system is both **hydraulic** and **electrical**:

- **Hydraulic:** the lever pushes fluid to the caliper, which squeezes the pads onto the disc.
- **Electrical:** the lever also actuates a sensor that **cuts motor power** when braking.

This second function matters for diagnosis: a brake sensor stuck in the "applied" position will prevent the bike from driving at all, even though the hydraulics are fine.

Symptom: E02 Brake Error

Check in this order:

1. **Brake lever sensor / switch.** Confirm the lever returns fully under its own spring pressure. A lever that binds will hold the sensor on.
2. **Lever connector.** Unplug, inspect for corrosion or bent pins, and reseal.
3. **Wiring.** Check the harness from the lever to the controller for chafing, especially around the steering head.

4. **Both levers.** The error may originate from either the front or the rear lever.
 5. **Adjustment.** Confirm the brake is adjusted to appropriate tension so that it can respond in time without dragging.
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Symptom: brakes feel spongy or the lever reaches the bar

Spongy lever feel is characteristic of **air in the hydraulic system** or a **fluid leak**.

1. **Check for leaks** at the caliper, the hose fittings and the master cylinder.
2. **Check fluid level** in the master cylinder reservoir.
3. **Bleed the system** to remove air. Hydraulic brake bleeding requires the correct fluid and a bleed kit; if you have not done it before, a bike shop can complete it quickly.
4. **Check pad wear.** Very worn pads require excessive lever travel and feel spongy even with a correctly bled system.

“ **Do not ride with a brake fault.** If the brake cannot stop the wheel reliably, stop riding and repair or replace the system. Brake failure is the most consequential fault a bike can have.

Symptom: brakes drag or the wheel does not spin freely

1. **Caliper alignment.** Loosen the caliper mounting bolts, apply the brake to center the caliper on the disc, then retighten. The disc must sit centrally between the two pads.
 2. **Bent disc.** Check the rotor for runout. A distorted disc can be straightened or replaced.
 3. **Piston not retracting.** A dirty or corroded caliper piston will not return. Clean the pistons and, if needed, service the caliper.
 4. **Lever preload.** A lever that cannot fully release holds residual pressure. Check the lever and the sensor.
 5. **Contaminated pads.** Oil or fluid on the pads causes noise and poor performance. Replace contaminated pads — they cannot be cleaned reliably.
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Range impact: a dragging brake is a constant energy drain. If range has dropped suddenly, check the brakes early.

Symptom: brake noise

Sound	Likely cause	Action
Squeal	Contaminated or glazed pads; damp conditions	Clean or replace pads; bed them in
Grinding / metal-on-metal	Pads worn through to the backing plate	Replace pads immediately and inspect the disc
Scrape once per wheel revolution	Slight disc runout or a marginally out-of-true rotor	Check rotor trueness and caliper alignment
Constant rub	Caliper misalignment or a piston not retracting	Realign the caliper and service the pistons

New pads need a **bedding-in** period — a series of moderate stops from moderate speed — before they deliver full performance.

Symptom: brake lever is hard to pull or feels stiff

- **Cable-actuated brakes (some eBikes):** a dry, kinked or corroded cable. Lubricate or replace the cable.
- **Hydraulic:** a blocked hose or a seized caliper piston. Service the caliper and inspect the hose.

Routine brake maintenance

Interval	Action
Before every ride	Check lever feel, pad thickness and that the lever cuts motor power

Interval	Action
After every ride (off-road)	Inspect pads for grit and glazing; clean the caliper area of mud
Weekly / frequently	Check pad wear and rotor condition; confirm no drag
As needed	Adjust cable tension; bleed hydraulic systems; replace pads
Per owner manual	Adjust brakes frequently and change brake pads in time
After wheel removal	Re-center the caliper and re-verify disc alignment

Brake components and warranty

Brake pads, rotors, brake handles, brake cables and covers are **wear-and-tear components and are excluded from warranty**. Replacements are available at cost — see [Spare Parts & Compatibility](#).

Note the difference between:

- **Consumables** — pads, rotors, cables: not covered.
- **Manufacturing defects** in the brake assembly: covered under the 12-month electrical/mechanical component warranty, subject to exclusions. See [Warranty](#).

Brake installation

Hydraulic disc brake systems and brake pads for the D-series are available as replacement parts. A step-by-step video is available: *How to Install the Front Disc Brake on a CEMOTO Electric Dirt Bike*. See [Technical Guides](#).

“ **Critical during assembly:** when installing the front caliper, pull the transport plug only after seating the pads — squeezing the lever with the pads removed will over-extend the pistons.

Related pages

- [Display & Error Codes](#)
- [Drive & Transmission](#)
- [Maintenance Schedule](#)
- [Spare Parts & Compatibility](#)

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