USER MANUAL

BRAKE HOSE CUTTING AND INSERT TOOL

A clean, square cut and a barb driven straight and fully home: that is what seals a hydraulic brake fitting. This manual covers preparation, cutting, insertion and the checks before riding.

BICYCLE HYDRAULIC BRAKE HOSES · ALUMINIUM ALLOY, BLACK · ≈ 151 G



01 · BEFORE YOU START

CONTENTS, COMPATIBILITY, SAFETY

ITEM	DETAILS
Insertion vice	Aluminium alloy body: clamping jaw with locking screw that holds the hose, handled pressure screw that pushes the barb in on axis
Cutting blade	Bladed hose cutter, for a clean, square cut

Olives, barbs and nuts are not included: use the kit matching the make and model of your brake.

What this tool does

A hose cut at an angle or crushed with pliers does not seal: the olive compresses crooked and the brake leaks. Here, the blade cuts **clean and square**, the vice holds the hose without crushing it, and the pressure screw drives the barb **straight, on axis, until it bottoms out**, with no hammer blow. The fitting is clean first time.

Compatibility

- Bicycle hydraulic brake hoses: road, MTB, gravel, BMX.
- Jobs: shortening a hose on a new bike, replacing a lever or a caliper, routing a hose internally, replacing a damaged hose.
- To be used with the olive and barb specified by your brake's manufacturer. Velkyne offers BH59 and BH90 olive and barb kits for Shimano hoses.



The pressure screw's driver: its pin enters the barb and guides it during insertion.

SAFETY

- **Brake fluid** irritates skin and eyes; DOT fluid strips paint. Gloves, safety glasses, rags, and a protected floor.
- Not a drop on the rotor or the pads: contaminated pads no longer brake and must be replaced.
- The blade is sharp: cut away from your fingers, store the blade closed.
- A brake that has just been opened must be **bled and tested** before any ride.

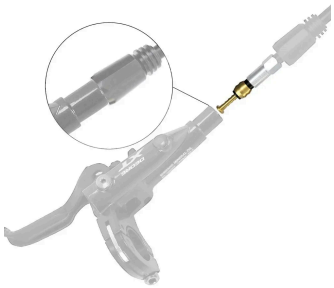
You will also need

- Your brake's olive + barb + nut kit
- Open-ended spanner for the compression nut (often 8 mm) and a torque wrench
- Bleed kit and the fluid specified by the brake manufacturer
- Hex key for the vice's locking screw
- Degreaser, rags, a spacer for the pads

02 · GETTING READY

MEASURE, PROTECT, PREPARE THE HOSE

1. **Remove the wheel and the pads** of the brake concerned, and slide a spacer between the pistons. Nothing that brakes must receive any fluid.
2. **Work out the length.** Turn the bars fully both ways and, on a mountain bike, compress the suspension: the hose must follow without pulling or looping. Mark the cut with a marker. A hose cut too short cannot be lengthened: measure twice.
3. **Open the fitting** at the lever (or the caliper, depending on what you are replacing): loosen the compression nut, pull the hose out straight, plug the port or keep the hose raised to limit fluid loss.
4. **Remove the old nut and the old olive** from the hose: cut behind the olive if it refuses to slide. A compressed olive is never reused.
5. **Slide on the new nut, then the new olive** onto the hose, in that order, before any insertion: once the barb is in, it is too late.



The order on the hose: compression nut, olive, then the barb at the end. The hose then goes into the lever until it bottoms out.

WHICH HOSE, WHICH BARB?

Hoses do not all have the same inner diameter, and the barb must match the hose, not just the brand. Check the reference printed on the hose sheath before choosing the kit.

FOR INTERNAL ROUTING

Attach a pull wire or a guide liner to the old hose before pulling it out of the frame: the new one will follow the same path without dismantling.

03 · PROCEDURE

CUT, INSERT, CONNECT

1. **Cut square.** Place the hose in the blade, at the mark, perfectly perpendicular, and cut in one firm stroke. The cut face must be round, clean, without burr. Do it again if it is oval or angled.
2. **Clamp the hose in the vice,** cut end facing the driver, protruding a few millimetres from the jaw. Tighten the locking screw just enough to stop the hose sliding back: too tight, it gets crushed.
3. **Set the barb on the driver,** its head against the driver's face, the pin engaged in the barb, and present it in line with the hose.
4. **Turn the handle** slowly and smoothly: the barb goes in straight. Stop when its head touches the hose's cut face: it has bottomed out.
5. **Release and check.** Barb head flat against the hose, sheath intact, no bulge. A barb that went in crooked or not fully home is removed and replaced with a new one.
6. **Connect.** Push the hose into the lever or caliper **until it bottoms out**, slide the olive down, then tighten the compression nut to the brake manufacturer's torque while holding the hose pushed in.
7. **Bleed** following the procedure and fluid specified by the brake manufacturer. Refit the pads and the wheel, pump the lever until a firm bite point returns.
8. **Test at a standstill:** lever squeezed hard for a minute, not a drop at the fitting. Then a few hard stops at low speed in a safe place, and another check of the fitting.



The cut: hose perpendicular to the blade, one firm stroke.

WATCH OUT

- Never drive a barb in with a hammer or pliers: it goes in crooked, splits the hose and the fitting will leak.
- Never reuse a hose with an old olive: a new olive every time the fitting is opened.
- Do not ride with a soft lever or a weeping fitting: braking can vanish all at once.

AFTER BLEEDING

Clean the caliper and lever with degreaser, then a clean rag: a forgotten trace of fluid ends up on the rotor on the first ride.

04 · BUILT TO LAST

TROUBLESHOOTING, CARE, VIDEOS

If something goes wrong

SYMPTOM	LIKELY CAUSE, FIX
The fitting weeps	Olive poorly compressed (hose not bottomed out, nut not to torque) or angled cut. New olive and barb, recut, start again.
The barb goes in crooked	Hose not in line with the driver, or oblique cut. Remove the barb, recut, reposition.
The hose gets crushed in the vice	Locking screw too tight. Loosen slightly: the hose only needs to stay put.
Soft lever after reassembly	Air in the system: full bleed as per the brake manufacturer.
Brake squeals or brakes poorly	Contaminated pads or rotor. Degrease the rotor; replace the pads.

Caring for the tool

- Wipe off brake fluid immediately: DOT attacks the anodising.
- A drop of light oil on the pressure screw's thread.
- Dull or chipped blade: replace it, a clean cut depends on it.
- Store the tool dry, blade closed.

Going further, on video

Independent tutorials on shortening a brake hose, scan to watch.

How To Shorten A Hydraulic Disc Brake Hose
The Cycle Workshop · English

How To Shorten Shimano MT200 Hydraulic Brake Hoses
NineLives · English

Need help?

velkyne.com/contact
Our team answers your questions about use and compatibility.

Clean, straight, fully home.
A square cut, a barb on axis, a new olive: a brake's seal comes down to these three moves.

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