

Assembly of the Varioline

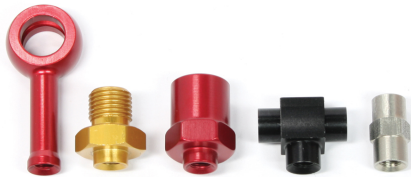
1. Select the Vario brake line.
2. Select the correct Vario fitting with adequate angle/thread.

IMPORTANT:

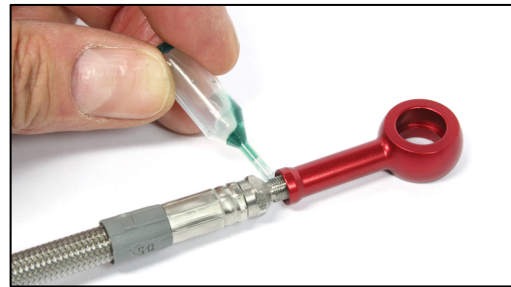
Never bend any fitting!
 Never use any fitting a second time.

3. Screwing the fittings:

- a. **Fixed connection parts**
 (ring fittings, fixed threads and manifolds/adapters)

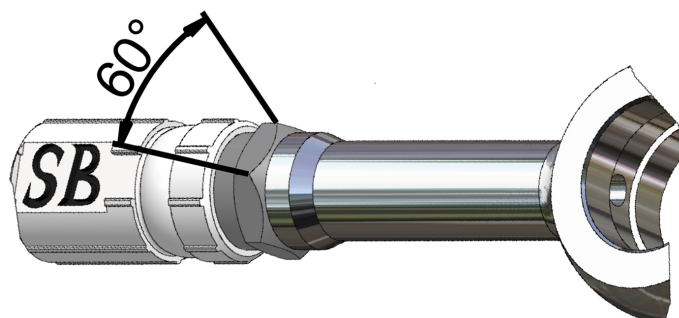


- Mount the fitting one rotation on the threaded end of the brake line.
- Apply **one drop** of the supplied loctite onto the Vario thread.
- Screw fittings **hand tight** until the fitting hits the conical part of the threaded nipple.



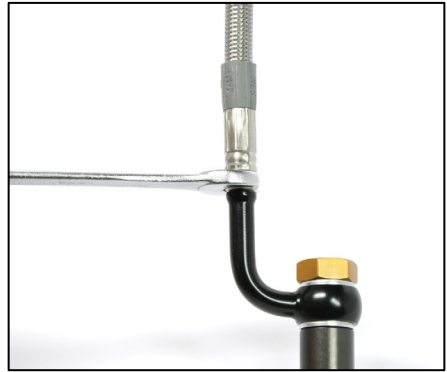
• ***Tighten up the ring fitting 0-60°***

Insert a rod of 10mmØ through the eye of the banjo bolt fitting and hold it. Use an 8mm flat wrench on the hex part of the threaded nipple. Now torque it 60° which is one side of the hex (i.e. tip to tip).

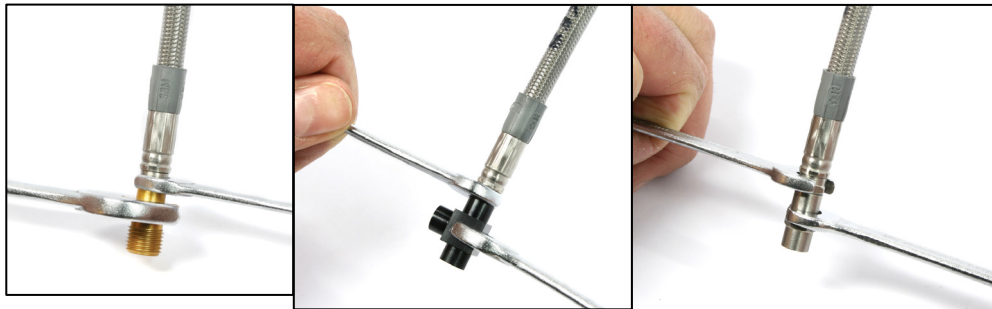


- ***Tighten up the ring-fitting 70-90°***

First place the fitting with a **banjo bolt** at the proposed position of the motorbike. Use an 8mm flat wrench for the hex of the threaded nipple and torque it **60°** (from tip to tip on a hex).



- ***Tighten up thread, manifold and adapter***



Choose a flat wrench which fits onto the connection. Place with an 8mm wrench at Hexagon on the threaded nipple and tighten the screw by **60°** (from tip to tip on a hex).

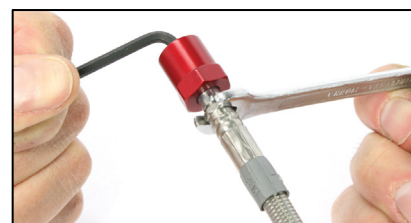
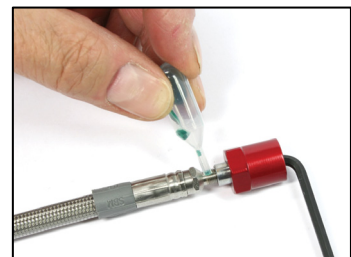
b. Loose threads



Loose threads consist of a threaded nut and a threaded pin.

- Plug the threaded pin, similar to the above image, into the nut.
- Fix the threaded pin with a hex wrench (size 3). Screw it with one rotation onto the Vario thread.
- Apply one drop of the supplied loctite onto the Vario thread.

Use the hex wrench to screw the threaded pin hand tight and finally tighten up 60° (from tip to tip on a hex).



Motorbike assembly of Varioline

1. Drain the brake fluid.
2. Dismantle original the brake lines one by one and install new Vario brake lines in the same way as the original ones. Brake lines with ring fittings need to be mounted with banjo bolts. Brake lines with fixed threads must be mounted directly. Always use the supplied seal rings. Brake lines with loose threads must be mounted directly, no seal rings required.



IMPORTANT: Only use supplied seal rings. Never re-use seal rings!

3. It must be ensured that after the installation no twist, no tension (even not in rebound state), no bend or chafe marks have emerged. If any of the above problems have appeared, the brake line must be adjusted as follows:

Use a gripper to hold the stainless press sleeve on the gear. Turn the threaded nipple with an 8mm flat wrench on the spanner flat until the desired position is reached (max. 180°)

IMPORTANT:

Never turn fittings more than 180°!
Never bend any fittings!



If a rotation of 180° is insufficient for solving the above problems, the line has to be re-installed or even replaced if necessary.

4. Install and assemble other brake lines as described above.

Tighten the banjo bolts and the thread-connections to **17-20 Nm**. It is necessary to use a torque wrench, because the tightness of the system cannot be guaranteed if the banjos and threaded connections are tightened insufficiently or over tightened.

5. After completing the installation, fill in the brake fluid and bleed the system in accordance with manufacturer's specifications.
6. Finally pressurise the system by pulling the brake lever and check all connections for leaks.