

# Bleeding Shimano brakes



## Step 1

Rotate brake lever on the handlebar to horizontal position. Remove lever bleed port screw with O-ring



## Step 2

Screw master cylinder syringe reservoir (30ml, without plunger) into bleed port.



## Step 3

Remove caliper bleed nipple rubber cap, set 7mm ring spanner.

Draw oil into 30ml bleed syringe, attach tube to it. **Remove any air from bleed syringe and tubing.**

Attach bleed syringe tubing to the caliper bleed nipple.



## Step 4

Open bleed nipple 1/4 turn, carefully push bleed syringe plunger to inject oil - oil will start to fill lever syringe taking any present air with it.

Go on until there is no more air bubbles mixed with the oil coming out of the lever.

\*Oil from the lever being particularly discoloured indicates that the oil is very old.



## Step 5

Close bleed nipple, disconnect bleed syringe tubing.

Connect second tube to the caliper bleed nipple and some reservoir, open bleed nipple 1/4 turn - oil will start to flow out and oil level in the lever syringe will drop.

Close bleed nipple once there is no more air bubbles in the oil leaving the caliper. Do not disconnect tube.

**Be sure to close bleed nipple before all of the fluid drains from the lever syringe.**

\*Tapping the caliper body and brake line with a screwdriver handle or similar may help to dislodge any trapped air bubbles. It may also help to move the position of the caliper at this time.

## Step 6

Press and hold brake lever. Promptly open and close caliper bleed nipple to release any air bubbles may still remain in the caliper. Release brake lever.

Repeat 2-3 times and tighten the bleed nipple to 4-6Nm while still holding the brake lever to the bar.

Remove tubing, place rubber bleed nipple cap.

## Step 7

Operate brake lever 5-10 times allowing it to snap back to rest position - this will allow any air in the master cylinder to rise up into lever syringe.

Tilt master cylinder 30 degrees up and down, repeat operating brake lever until there are no more air leaving bleed port.

Tighten lever clamp with lever in the horizontal position.

\*The normal condition for the brake lever is to be stiff at this point.



## Step 14

Remove oil from lever syringe reservoir with 30ml bleed syringe and tubing allowing a small drop of oil to remain inside the bleed port.

Unthread the master cylinder syringe reservoir.



## Step 15

Reinstall master cylinder bleed port screw and O-ring, wipe any excess mineral oil with paper towel.



## Step 16

Reinstall brake caliper, pads or wheel if any of them were removed during bleeding.



## Original Shimano bleed kit



## Syringe bleed kit

- 30 ml syringe reservoir
- 30ml bleed syringe with tubing
- tube piece
- some reservoir

