

**Haynes**
shows you how

BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.

4 Clutch slave cylinder - removal, inspection and installation

Warning:

Brake fluid is poisonous; wash off immediately and thoroughly in the case of skin contact, and seek immediate medical advice if any fluid is swallowed or gets into the eyes. Certain types of brake fluid are flammable and may ignite when allowed into contact with hot components; when servicing any hydraulic system, it is safest to assume that the fluid is flammable, and to take precautions against the risk of fire as though it is gasoline that is being handled. Brake fluid is also an effective paint stripper, and will attack plastics; if any is spilled, it should be washed off immediately, using copious quantities of fresh water. Finally, it is hygroscopic (it absorbs moisture from the air) - old fluid may be contaminated and unfit for further use. When topping-up or replacing the fluid, always use the recommended type, and ensure that it comes from a freshly-opened sealed container.

Removal

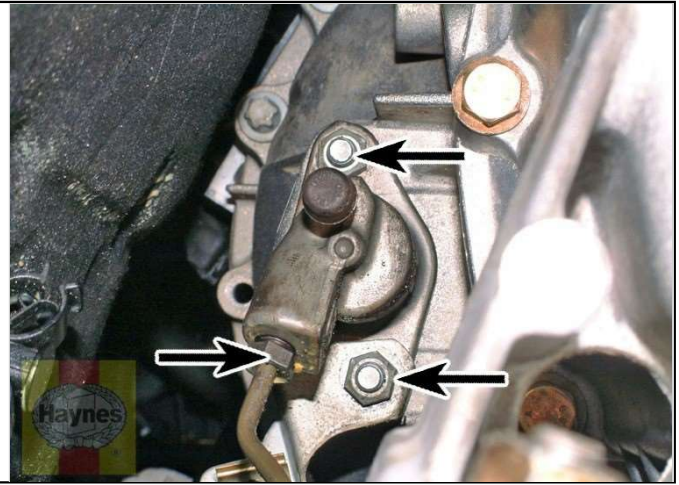
1 Remove the brake fluid reservoir cap, and siphon out sufficient brake fluid so that the fluid level is below the level of the reservoir fluid hose connection to the clutch master cylinder (the brake fluid reservoir feeds both the brake and clutch hydraulic systems). Do not empty the reservoir, as this will draw air into the brake hydraulic circuits.

2 To improve access, raise the vehicle and support it securely on jackstands.

3 Where applicable, remove the underbody shield for access to the bellhousing.

4 Place a container beneath the hydraulic line connection on the clutch slave cylinder to catch escaping brake fluid. Unscrew the fitting nuts and disconnect the fluid line. Remove the nut securing the line bracket to the slave cylinder (see illustration)

4.4 Disconnect the line fitting, then remove the retaining nuts



5 Remove the remaining securing nut, and withdraw the slave cylinder from the mounting studs on the bellhousing.

Inspection

6 Inspect the slave cylinder for fluid leaks and damage, and replace if necessary. No spare parts are available for the slave cylinder, and if faulty, the complete unit must be replaced.

Installation

7 Installation is the reverse of removal, noting the following points.

- A. Before installation, clean and lightly grease the end of the slave cylinder pushrod.
- B. Tighten the mounting nuts to the specified torque.
- C. On completion, top-up the brake fluid level and bleed the clutch hydraulic circuit as described in [Section 6](#).