



Haynes
shows you how

BMW 3-Series 320i & 320xi (12-14), 325i, 325xi, 330i & 330xi (06) & 328i & 328xi (07-14) Haynes Online Manual

3 Clutch master 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.

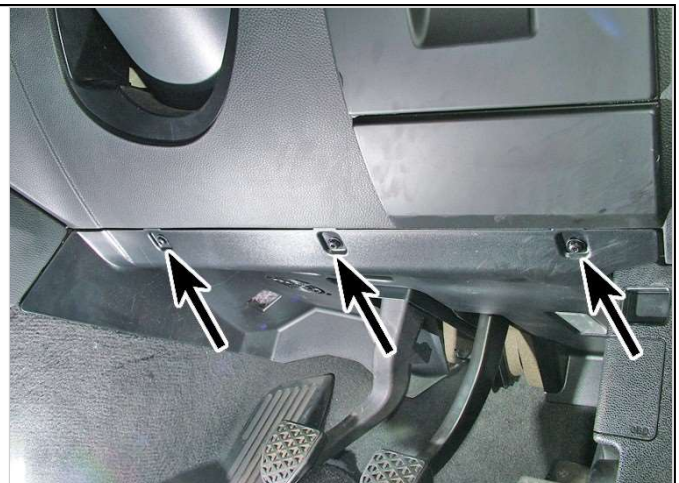
Caution:

Don't allow brake fluid to come into contact with the paint as it will damage the finish.

Removal

1 Release the fasteners and remove the trim panel above the driver's pedals (see illustration) . Disconnect any electrical connectors as the panel is withdrawn.

3.1 Driver's knee bolster panel mounting fasteners



2 Release the clips, remove the plastic cover, then remove the brake fluid reservoir cap. Siphon out enough fluid so that the 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 systems). **Note:** *Do not empty the reservoir, as this will draw air into the brake system.*

3 Disconnect the clutch master cylinder hose from the brake fluid reservoir. Be prepared for fluid spillage, and plug the open end of the hose to prevent dirt entry.

4 Unscrew the mounting nuts and push back the bolts securing the master cylinder to the pedal bracket in the footwell (see illustration) .

3.4 Remove the mounting nuts and push the bolts out of the housing

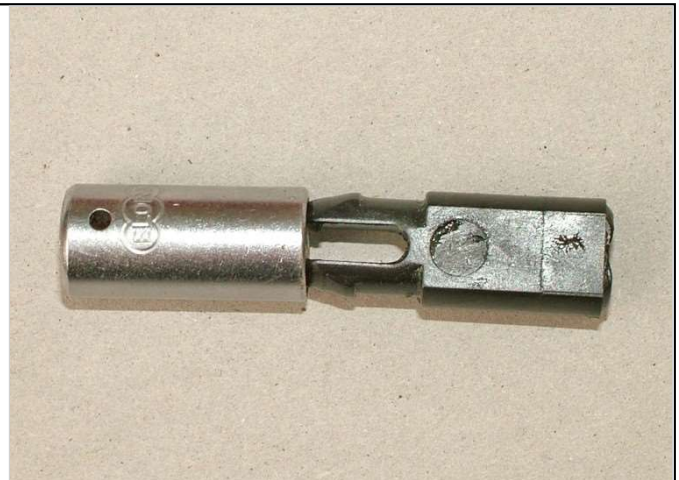


5 Using an 8 mm socket, squeeze together the ends of the pin, then press out the master cylinder pushrod pivot pin from the clutch pedal (see illustrations) .

3.5a Pushrod pivot pin location

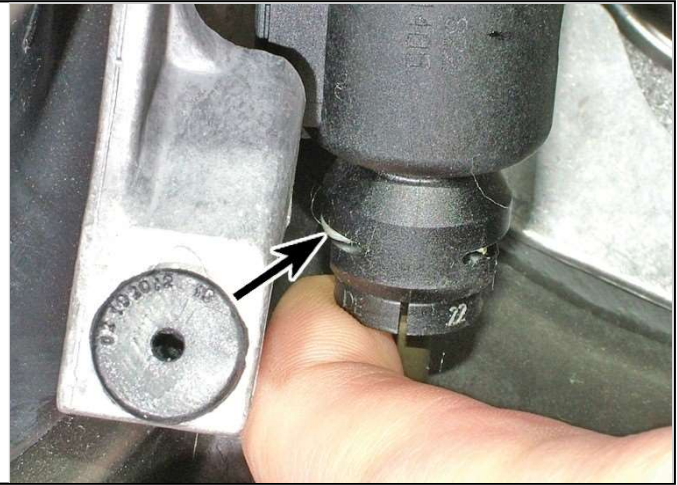


3.5b Push an 8mm socket onto the end of the pin to compress the retaining clips, then remove the pivot pin



6 Using a small screwdriver, pry out the retaining clip and pull the hydraulic pressure line from the master cylinder (see illustration) . Withdraw the master cylinder and ease the fluid supply hose through the firewall grommet, taking care not to strain the pipe. Do not pull the hose completely through the grommet. Be prepared for fluid leaks.

3.6 Pry out the clip and detach the clutch fluid line



7 Pull the supply hose from the top of the master cylinder, leaving the hose in place in the firewall grommet for reassembly. Be prepared for fluid spillage.

8 Depress the locking tab and disconnect the master cylinder switch wiring plug (if equipped). If required, carefully release the clips and detach the switch from the cylinder.

Inspection

9 Inspect the master cylinder for fluid leaks and damage, and replace if necessary. At the time of writing, no spare parts were available for the master cylinder, and if faulty, the complete unit must be replaced. Check with your local dealer or parts supplier.

Installation

10 Installation is the reverse of removal, noting the following points:

- A. Take care not to strain the master cylinder fluid pipe during installation.
- B. Top-off the level in the brake fluid reservoir, then bleed the clutch hydraulic system (see [Section 5](#)).