Power Brake Booster, Replacing Power Brake Booster, Replacing

Preparation

Disconnect the battery lead

Removal

Preparations for removing the power brake booster

Switch off the ignition.

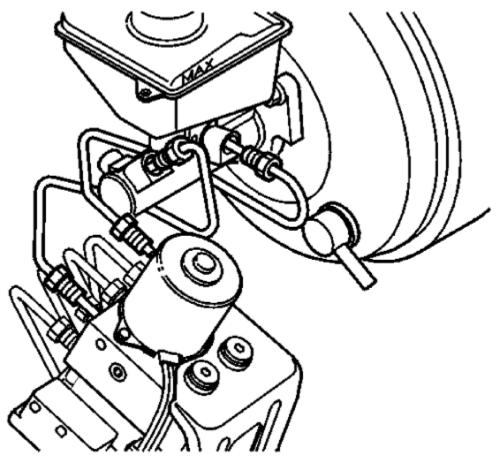
Remove the cross member. (On 5 cylinder engines): Remove the screws and nuts from the engine mounting. Lift out the cross member.

Remove the air cleaner (ACL) housing.

Remove the plastic cap and the cable holder.

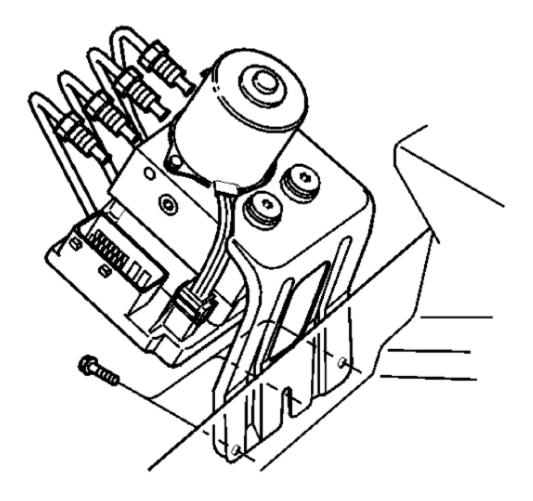
Remove the integrated relay/fusebox.

Preparations for removing the ABS unit



Clean the brake pipes terminals at the master cylinder and ABS unit. Place paper under the master cylinder to avoid <u>brake fluid</u> spillage. Remove all the brake pipes from the master cylinder and the ABS unit. Plug the master cylinder socket for the brake pipes.

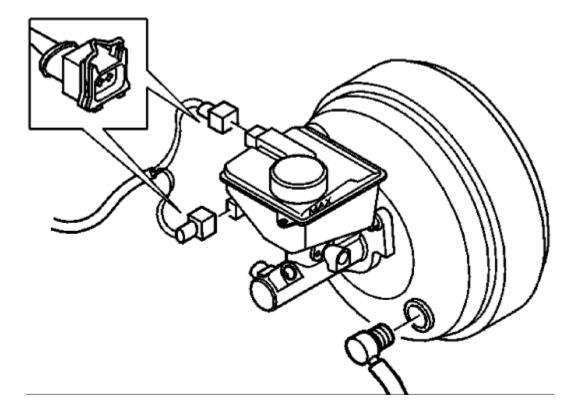
Remove the ABS unit and bracket from the side member



The unit is secured with three screws.

NOTE: Store the ABS unit in such a way that no dirt can get into the pipe couplings.

Preparations for removing the master cylinder



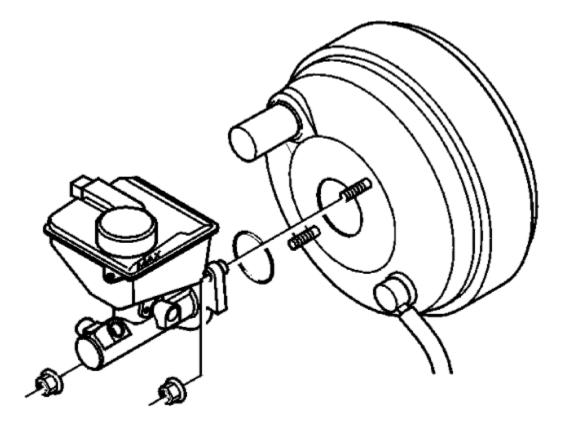
NOTE: On cars with 6-cylinder engines: Disconnect the connectors from the master cylinder.

Mark up a connector.

Disconnect the connectors on the power brake booster.

NOTE: If the car has hydraulic clutch: Block the hose to the clutch cylinder. Use hose pliers.

Remove the master cylinder



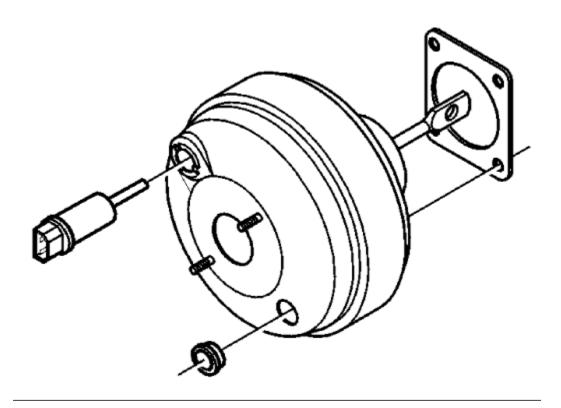
Avoid brake fluid spillage when removing.

NOTE: Ensure that the gasket between the power brake booster and the master cylinder stays in place on the master cylinder.

Remove the soundproofing panel and the power brake booster

Transfer the components to the new power brake booster

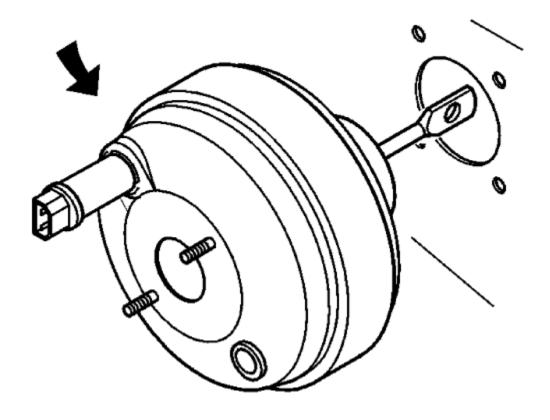
Transfer:



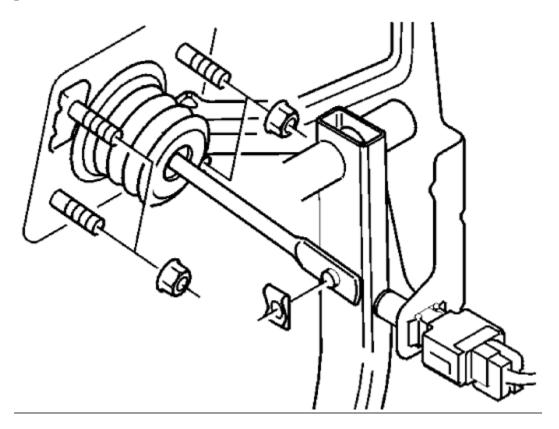
- the pedal position sensor.
- the check valve
- the terminal for the check valve.

Installation

Install the power brake booster

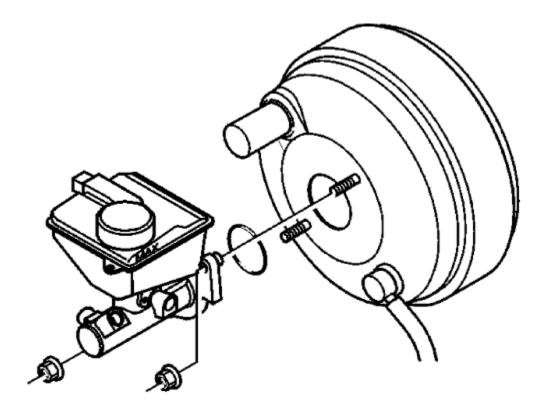


Install the push rod for the power brake booster and the retaining clip on the brake pedal



Tighten the power brake booster. Tighten to ${\bf 25~Nm}$. Install the soundproofing panel.

Install the master cylinder

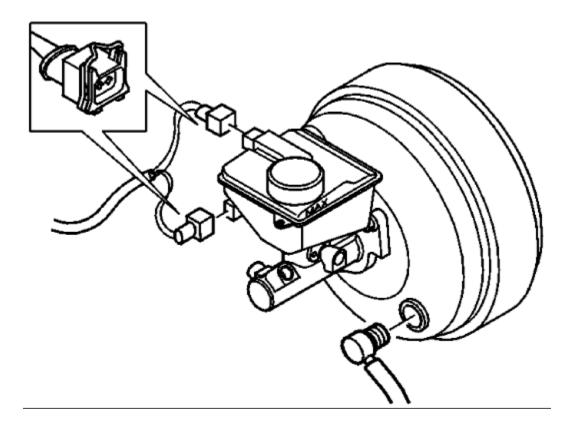


NOTE: Check that the gasket is in place on the master cylinder.

Tighten the nuts. Tighten to $25\ Nm$. Install the vacuum hose on the check valve for the power brake booster.

Install the connectors and vacuum hose

Install:

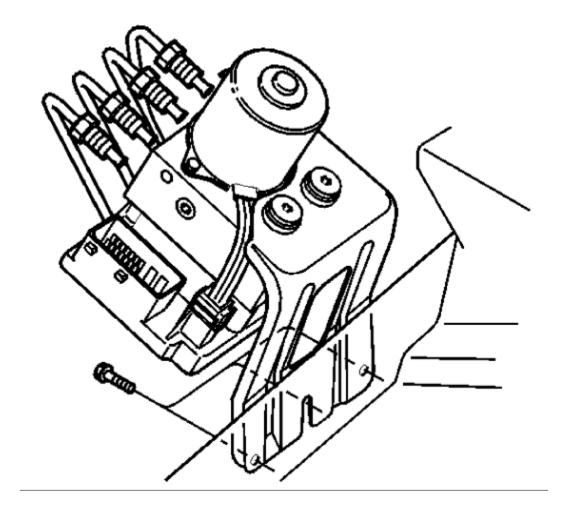


- the connectors on the master cylinder and the power brake booster
- the vacuum hose on the check valve.

NOTE:

- The vacuum hose must be behind the bracket for the ABS hydraulic modulator.
- There are 2 connectors for the master cylinder on cars with 6 cylinder engines. One is for the pressure switch and the other is for the power brake booster.

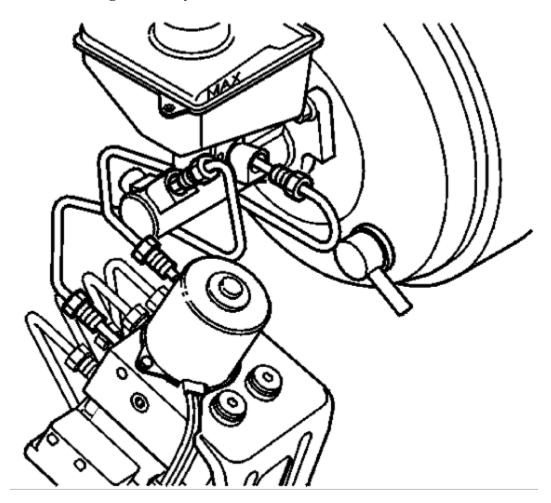
Install the ABS unit and the bracket



Install the bracket in the side member. Tighten to $10\ Nm$

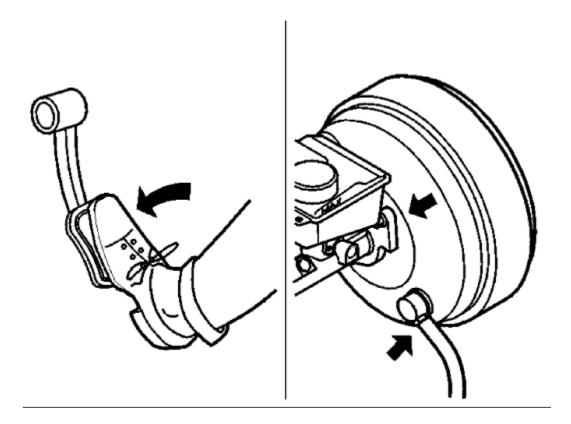
Install the brake pipes in the master cylinder and in the hydraulic modulator Tighten to $17\ Nm$

Install the integrated relay/fusebox and the connector for the ABS unit



Install the air cleaner (ACL) housing Install the cross member Fill and bleed the brake system

Checking the power brake booster



Depress the brake pedal several times until it feels stiff. Hold the pedal down. Start the engine. The pedal should travel and feel softer.

Release the brake. switch off the engine. Wait **1 minute**. Then depress the pedal. The pedal should still feel soft but should become stiffer when it is depressed several times.

There should be no leakage between the vacuum hose and the terminal at the power brake booster.

There should not be any leakage between the master cylinder and the power brake booster.

Check that the stop lamp functions.

If the stop lamp switch has been modified or changed after installation of the master cylinder and power brake booster it must be readjusted.