

**Wheels:** An e-mail from Marilyn says, “I have a problem with the brakes on my 1978 Honda. The brake pedal is not as solid as it should be. I wouldn’t call it spongy, but it travels further to the floor than it should. The following items have been replaced: all brake lines, including the ones to the front calipers, both flexible lines to the front calipers, and the master cylinder. The lines front and rear have been bled. The fluid reservoir under the hood is right on the line, so there’s no evidence of leaks. Both rear drums have been removed. Both wheel cylinders are dry. The rear brakes have been adjusted. I don’t have a clue what is wrong. The only strange thing I noticed was that when the front of the car is up on jack stands and the brakes are bled, the pedal feels rock solid. Then when the front is lowered back to the ground, the pedal is the same as it was before it was bled.

**Halderman:** A low brake pedal can be due to brake adjustment or to air trapped in the hydraulic system. When the vehicle is raised at the front, the air pocket must have moved upward, so I suspect that the problem is due to air trapped in the master cylinder or one of the valves. Has the vehicle been serviced before this problem occurred and the brake fluid allowed to drain from these components? If this is the case, it is very difficult to remove this trapped air. I would start by bleeding the master cylinder and from all of the lines at any valves in the system. Be sure to wait 15 seconds between brake applications during the bleeding process and do not depress the brake pedal with too much force. Other possible causes include a defective master cylinder.

