

**Wheels:** A recent e-mail from a reader says, "I purchased new in September, 2001, a 2002 Honda Accord EX with the V-6 Hi Tech Engine, which has a 4-wheel disc ABS braking system. The car now has about 65,000 miles and has always been serviced only by this dealer. The problem is with the braking system, specifically the master cylinder - original and 3 replacements at various mileage/service intervals as follows:

Date Mileage

Description on Service Order - Verbatim response/result

- 3/26/04** 29,188 miles: needs master cylinder - can't get part till Monday - pads 8.4 mm FR  
5.6 mm RE
- 4/9/04** 29,538 miles: replaced master cylinder and 3 cans of brake fluid (time delay due to locating part)
- 5/13/04** 30,478 miles: Master cylinder was replaced one month ago - still bad. No problem found at this time - vehicle braking O.K.
- 1/11/05** 37,247 miles: brake master cylinder was replaced 4/9/04. Bad again. Installed new master cylinder
- 5/12/05** 40,025 miles: metal noise when braking. Replaced rear pads - turned rotors. Front pads 4.5 mm. Flushed and bled all brakes
- 1/4/06** 46,590 miles: When braking pedal almost goes to floor before braking felt. Master cylinder has been replaced twice. Has air in lines. Vacuum bled brake lines and finished by manually bleeding calipers
- 8/31/07** 63,473 miles: replace front pads and machined front rotors. Recommend brake master cylinder - losing pressure
- 9/7/07** 63,631 miles: replaced master cylinder and 2 cans of brake fluid - Pedal low

Note: Except for the front pads job, all of the other brake work and parts was done at no charge to me as "under warranty". The pedal still almost goes to the floor before braking is felt in moderate stops.

If a sudden hard stop is necessary, I feel it would not be done. I am a regular reader of your column and will appreciate your reply as to what could be causing this unusual and unresolved brake problem."

**Haldeman:** It appears to me to be a case of air trapped in the hydraulic system. If, for example, the brake fluid was allowed to escape during the replacement of master cylinder or other operations, air can get into the ABS hydraulic control unit and is very difficult to remove. Ask that the system be vacuum bled one component at a time. It may take several times over a period of several hours to get all of the air out of the system.

