Honda Anti-Lock Brake Systems

APPLIES TO:	Any Model With ABS
AUTHOR:	Mark Hawkins - Owner Honnda Hawke
ORIGINAL DATE:	04/12/99
LAST REVISED:	05/04/01

General Overview

Anti-lock braking systems (ABS) really can stop a car faster than conventional braking systems. There are a lot of situations where ABS can be very helpful such as one side of the road is slicker than the other, heavy braking on turns, very slick or icy pavement, panic stops, etc.

Traction is greatly reduced when tires skid, yet maximum traction is when the tires are just about ready to skid. On a regular brake system you usually "pump" the brakes on very slick surfaces which essentially locks and unlocks the wheels. This can affect the handling drastically. If the wheels do lock-up and skid during hard braking, the braking distance can be farther and steering control can be lost.

ABS can release skidding wheels separately, taking better advantage of the wheels that grip, which will improve handling. On an ABS equipped car, the ABS will release each wheel just before it locks up, faster than you could ever pump the brakes, decreasing braking distance and improving handling. This is felt as a "pulsation" in the brake pedal when the ABS system actually operates.

Knowing how to diagnose the Honda/Acura ABS system is easy if you know how the system operate. This article covers the basics of Honda / Acura ABS systems operation and how to quickly begin diagnosing the system and some of the common problems. Always have the proper vehicle service manual to refer to for your actual vehicle troubleshooting, system specifications, or safety precautions you may need while servicing. Access to manufacturer service bulletins are also a big help.

The Honda models with separate modulator / reservoir type ABS uses an electronic control unit (ECU), wheel speed sensors, pump, pump motor, accumulator, relays, wiring and an electronically controlled hydraulic unit, or modulator, to prevent tire skid during hard braking.