



# NAPA Tech TIPS

SUPPORTING TODAY'S PROFESSIONAL TECHNICIAN

## Subaru Cold Weather Braking Effort Problem

### Application:

1998, 1999 Legacy Sedan, Wagon, Outback, Forester.

### Problem:

Hard brake pedal (high effort) in extreme cold weather. Braking ability gets better as air temperature rises.

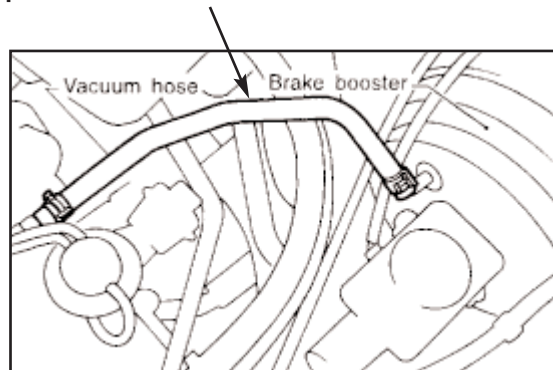
### Cause:

The vacuum hose in these vehicles has an in-line check valve (see graphic below). Moisture can accumulate in the valve. In cold weather the moisture freezes blocking the vacuum to the booster causing the greater brake effort. When the air temperature rises above freezing, the valve thaws out and normal brake effort returns.

### Solution:

Inspect hose and check valve assembly. If moisture is found, the source of the moisture must be eliminated. Check the emission system and the engine for proper operation, correct or repair as necessary. It may be necessary to replace the vacuum hose and check valve assembly to correct the freezing problem.

Approximate location of check valve inside vacuum hose.



### Note:

This Pro Tech bulletin is supplied as technical information only and is not an authorization for repair. Be sure to refer to the vehicle service manual and any applicable service bulletins for additional information.