

Wheel Hub (Locking): All Technical Service Bulletins Drivetrain - 4WD Mode Inoperative

SOURCE: Kia Technician Times

TITLE: 4WD Control Vacuum Line

APPLIES TO: Sportage 4WD

SERVICE TIP:

CONDITION

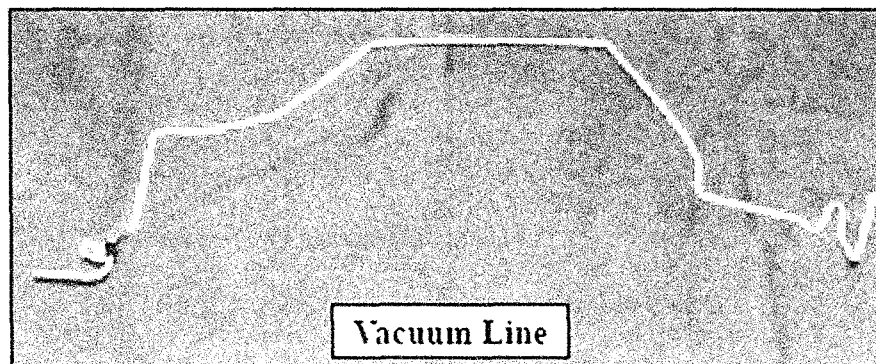
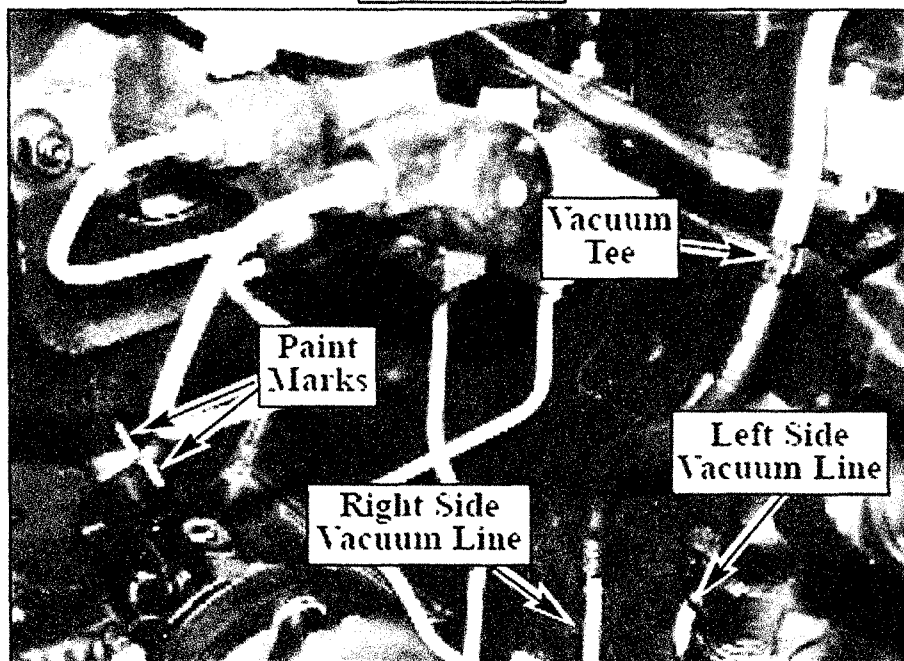
4 wheel drive mode inoperative (diagnosed either during or after replacing knuckles and hub seals) due to insufficient vacuum being applied to the hubs.

CAUSE

In some cases moisture has entered the vacuum system, and vacuum lines have become corroded, plugged, or have developed a leak.

CORRECTIVE ACTION

Photo 1



Verify that with 4 wheel drive mode selected, vacuum is present at the T-fitting downstream from the solenoid (see photo). If not, diagnose and

repair as required, otherwise use the following procedure to replace the vacuum lines:

Note: Procedure applies to right side line; left side needs no further info.

Disconnect and remove battery and battery tray. Leaving ground cables attached, remove clamp bracket from battery tray bottom and move out of the way. Remove plastic air resonator and disconnect throttle cable (plus A/T control cable if equipped). Disconnect MAF and IAC connectors, and 6 mm bolt holding DLC and MAF brackets to air cleaner housing. Disconnect air intake tube from throttle body, and MAF sensor from air filter housing. Remove tube, duct, and sensor assembly and set aside. Loosen rear engine hanger bracket and front surge tank support bracket. Disconnect coolant lines from throttle body or (alternatively) remove throttle body from surge tank but leave coolant lines attached. Remove surge tank. Cover intake to prevent anything from falling in. Mark steering column shaft and coupling for later reference (see photo 1), loosen clamps on both sides of the coupling and slide coupling back on intermediate shaft, disconnecting it from steering column.

Disconnect vacuum hoses in right wheel well and from T-fitting below the 4 wheel drive solenoid on the drivers side of the engine compartment. Pry vacuum line loose from 4 plastic retainer clips; 2 on bulkhead, 2 on inner wheel wells. Using slack in harness and carefully bending vacuum line only as necessary, free line from behind the harness bundle against the RF inner wheel well. Free vacuum line from behind the brake line attached to the (outboard position) of the differential pressure valve.

Note: Try leaving the old line intact while removing it and carefully observe the "route" you use to get it out. This will serve as "practice" that will come in handy when you install the new one.

Starting from the drivers side, free up old line and move it up until it clears the cylinder head at the location of rear engine hanger. Move and "snake" the line carefully as required to free it up and pull it out. Install the new line the same way, and assemble everything in reverse order. Observe reference mark on steering shaft when reassembling. Test drive and check 4 wheel drive operation.

*IF AFTER MARKET
Hubs, They MAY NOT Be
getting ENOUGH VACCUm.*

Read THIS INFO.