

- 11. Update the VSA modulator-control unit if it does not have the latest software (see page 19-135). If the unit already has the latest software, substitute a knowngood VSA modulator-control unit (see page 19-136).
- 12. Test-drive the vehicle.

NOTE: Drive the vehicle on the road, not on a lift.

13. Check for DTCs with the HDS.

Is DTC 108-21 indicated?

YES-Check for loose terminals in the VSA modulatorcontrol unit 36P connector. If the VSA modulatorcontrol unit was updated, substitute a known-good VSA modulator-control unit (see page 19-136), then retest. If the VSA modulator-control unit was substituted, go to step 1.

NO-If the VSA modulator-control unit was updated, troubleshooting is complete. If the VSA modulator-control unit was substituted, replace the original VSA modulator-control unit (see page 19-136). If any other DTCs are indicated, go to the indicated DTCs troubleshooting.
■

DTC 121-xx*: VSA Solenoid Valve Malfunction
DTC 122-xx*: VSA Solenoid Valve Malfunction
DTC 123-xx*: VSA Solenoid Valve Malfunction
DTC 124-xx*: VSA Solenoid Valve Malfunction

*: Any two-character subcode (see table)

DTC		Sectional	Valve
121	-01	Right-front	Regulator
İ	-02	and	
ļ	-11	left-rear	1
	-21	1	
	-24		
122	-01		Suction
	-21		•
	-22		
	-23		
123	-01	Left-front	Regulator
	-02	and	
	-11	right-rear	
	-21		
	-24		
124	-01		Suction
	-21		
	-22		
	-23		

- 1. Turn the ignition switch to ON (II).
- 2. Clear the DTC with the HDS.
- 3. Turn the ignition switch to LOCK (0), then turn it to ON (II) again.
- 4. Check for DTCs with the HDS.

Is DTC 121-xx, 122-xx, 123-xx, or 124-xx indicated?

YES-Go to step 5.

 $\mathbf{NO}\text{--Intermittent}$ failure, the system is OK at this time.

VSA System Components

DTC Troubleshooting (cont'd)

- Update the VSA modulator-control unit if it does not have the latest software (see page 19-135). If the unit already has the latest software, substitute a knowngood VSA modulator-control unit (see page 19-136).
- 6. Turn the ignition switch to LOCK (0), then turn it to ON (II) again.
- 7. Check for DTCs with the HDS.

Is DTC 121-xx, 122-xx, 123-xx, or 124-xx indicated?

YES-Check for loose terminals in the VSA modulatorcontrol unit 36P connector. If the VSA modulatorcontrol unit was updated, substitute a known-good VSA modulator-control unit (see page 19-136), then retest. If the VSA modulator-control unit was substituted, go to step 1.

NO-if the VSA modulator-control unit was updated, troubleshooting is complete. If the VSA modulator-control unit was substituted, replace the original VSA modulator-control unit (see page 19-136). If any other DTCs are indicated, go to the indicated DTCs troubleshooting.

Symptom Troubleshooting

VSA activation indicator does not go off, and no DTCs are stored

NOTE: If the VSA modulator was replaced prior to the activation indicator turning on, do the VSA sensor neutral position memorization (see page 19-133).

- 1. Turn the ignition switch to ON (II).
- 2. Check the VSA activation indicator for several seconds when the ignition switch is turned to ON (II).

Does the indicator come on then go off?

YES-The system is OK at this time.■

NO-Go to step 3.

- 3. Turn the ignition switch to LOCK (0).
- Disconnect the VSA OFF switch 5P connector (see page 19-134).
- 5. Check the VSA OFF switch (see page 19-134).

Is the VSA OFF switch OK?

YES-Go to step 6.

NO-Replace the VSA OFF switch (see page 19-134).

- 6. Disconnect the gauge control module 32P connector (see page 22-351).
- 7. Check for continuity between VSA OFF switch 5P connector terminal No. 2 and body ground.

VSA OFF SWITCH 5P CONNECTOR



Wire side of female terminals

Is there continuity?

YES-Repair a short to body ground in the wire between the gauge control module and the VSA OFF switch.

■

NO-Substitute a known-good gauge control module (see page 22-351), then go to step 1 and recheck. If it is OK, replace the original gauge control module (see page 22-351).■