

# SECTION 03-12 Air Intake System

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## VEHICLE APPLICATION

Taurus / Sable and Taurus SHO.

## DESCRIPTION

The air cleaner and duct system provides clean air to the throttle body (9E926). Outside air enters from an opening in the fender through the engine air cleaner intake tube and duct (9A673) and then into the engine air cleaner (9600) where it is filtered through the air cleaner element. From the engine air cleaner assembly it travels through the engine air outlet tube (9B647) and into the throttle body. On 3.0/3.2L SHO, from the engine air cleaner it travels through the Mass Air Flow (MAF) sensor 12B579 to the engine air outlet tube and into the throttle body. The positive crankcase ventilation (PCV) system is supplied clean air from a fitting on the engine air outlet tube on the 3.0L and 3.8L engines. Air induction noise is effectively eliminated by means of a sealed and tuned resonator chamber located in the air cleaner cover assembly and a secondary tuned venturi section in the inlet tube on the 3.8L engine. 3.0L engines use a secondary resonator in the inlet tube in addition to the resonator in the air cleaner cover.

The PCV system on 3.0/3.2L SHO engines is supplied clean air from a hose off the throttle body (TB) 9E926 to the LH (front) camshaft cover. Refer to Section 03-01B.

## REMOVAL AND INSTALLATION

### Air Filter Element—Replacement

Refer to Section 00-03 for the Emissions Systems Maintenance Schedule for frequency of filter inspection / replacement.

#### Removal

1. Loosen air cleaner outlet tube clamps at both ends and remove air cleaner outlet tube (9B659). On 3.0L, loosen clamp at throttle body only and leave air cleaner outlet tube connected to cover.
2. On Taurus SHO and 3.0L, disconnect airflow sensor electrical connector.
3. Release air cleaner upper cover clips, or remove bolts.
4. Remove air cleaner cover. Remove filter element.

### Inspection

Visually inspect the element and the air cleaner cover and tray for signs of dust or dirt leaking through holes in the filter or past the end seals. Place a light on the inside (clean side) of the filter and look through the filter at the light. Even the smallest hole is cause for replacement.

Also check the element for deformed seals or brittle spots that could fail under engine operation and cause a hole. Discoloration only, is not cause for replacement. Visually inspect a new element for possible damage in handling such as deformed seals or holes in paper.

#### Installation

1. Clean inside surfaces of air cleaner body. Install filter element.
2. Install air cleaner upper cover. Install bolts or fasten clips.

**REMOVAL AND INSTALLATION (Continued)**

3. Connect airflow sensor electrical connector.
4. Install air cleaner outlet tube.

**Air Cleaner****3.0L Base Engine****Removal**

1. Disconnect closure hose from air cleaner outlet tube and remove.
2. Disconnect and remove PCV hose, if equipped, from air cleaner outlet tube.
3. Disconnect MAF electrical connector.
4. Remove air cleaner to battery tray retaining screw.

**NOTE:** Engine air cleaner and engine air intake resonator (9F763) assembly may be removed together by removing resonator to fender retaining screw.

5. If engine air intake resonator is not being removed, unfasten air cleaner cover retaining clips and remove cover. Remove air cleaner element and reach inside to disconnect resonator to air cleaner locking tabs.
6. Remove air cleaner body.
7. Inspect inside surfaces of cover for traces of dirt leakage past element as a result of damaged element seals, incorrect element usage, or inadequate torque of cover retaining clips.

8. Clean sealing surfaces on tray and cover. Inspect element for possible damage in handling such as deformed seals or holes in paper.

**Installation**

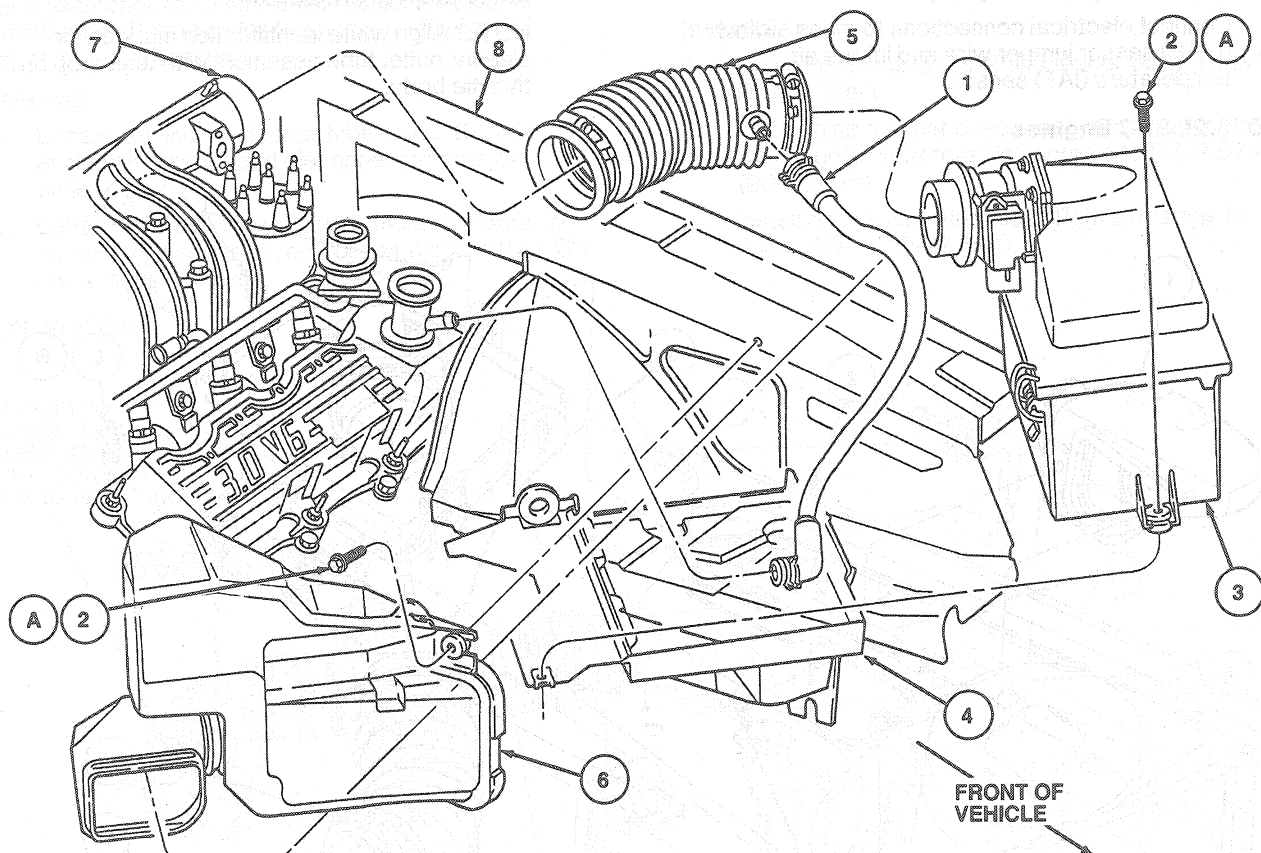
**NOTE:** Ensure resonator tabs are fully locked into air cleaner opening.

1. Position air cleaner body on battery tray. Ensure that mounting grommet is installed with metal side up and locating boss is firmly seated in battery tray grommet.
2. Install screw through grommet (metal side up) into J-clip in battery tray. Tighten screw to 4 N·m (36 lb-in).
3. Install air cleaner element, if removed.
4. Install air cleaner lid, if required. Make sure rear of cover is fully engaged with wedge. Close retaining clamps.
5. Install air cleaner outlet tube. Tighten clamp to 4 N·m (36 lb-in).
6. Connect PCV and closure hoses.
7. Connect MAF electrical connector.
8. Start engine and check for vacuum leaks around both ends of air cleaner outlet tube.

## REMOVAL AND INSTALLATION (Continued)

(Continued)

## 3.0L Engine



V7422-C

Item	Part Number	Description
1	6C342	Hose Assy
2A	806215-S141B	Screw (2 Req'd)
3	9600	Engine Air Cleaner
4	10732	Battery Tray

(Continued)

Item	Part Number	Description
5	9B659	Air Cleaner Outlet Tube
6	9F763	Engine Air Intake Resonator
7	—	Manifold Assy
8	—	LH Fender Apron
A	—	Tighten to 2.7-5.4 N·m (24-47 Lb·In)

## 3.0/3.2L SHO Engine

## Removal

1. Loosen air cleaner outlet tube clamp and disconnect air cleaner outlet tube.
2. Disconnect electrical connections at MAF sensor jumper wire and intake air temperature (IAT) sensor 12A697.
3. Remove air cleaner retaining screws and remove engine air cleaner from vehicle.
4. Inspect inside surfaces of cover for traces of dirt leakage past element as a result of damaged element seals, wrong element usage, or inadequate tension on cover retaining clips.

5. Remove air cleaner element and clean sealing surfaces on tray and cover. Inspect new element for possible damage in handling such as deformed seals or holes in paper.

## Installation

NOTE: The air cleaner assembly mounting tab must be engaged with the battery tray grommet boss.

1. Install a new element.
2. Position engine air cleaner to engine compartment side panel. Ensure that mounting grommet is installed with metal side up and battery tray grommet is fully seated in battery tray. Check air cleaner cover hinge assembly. Secure retaining clips.

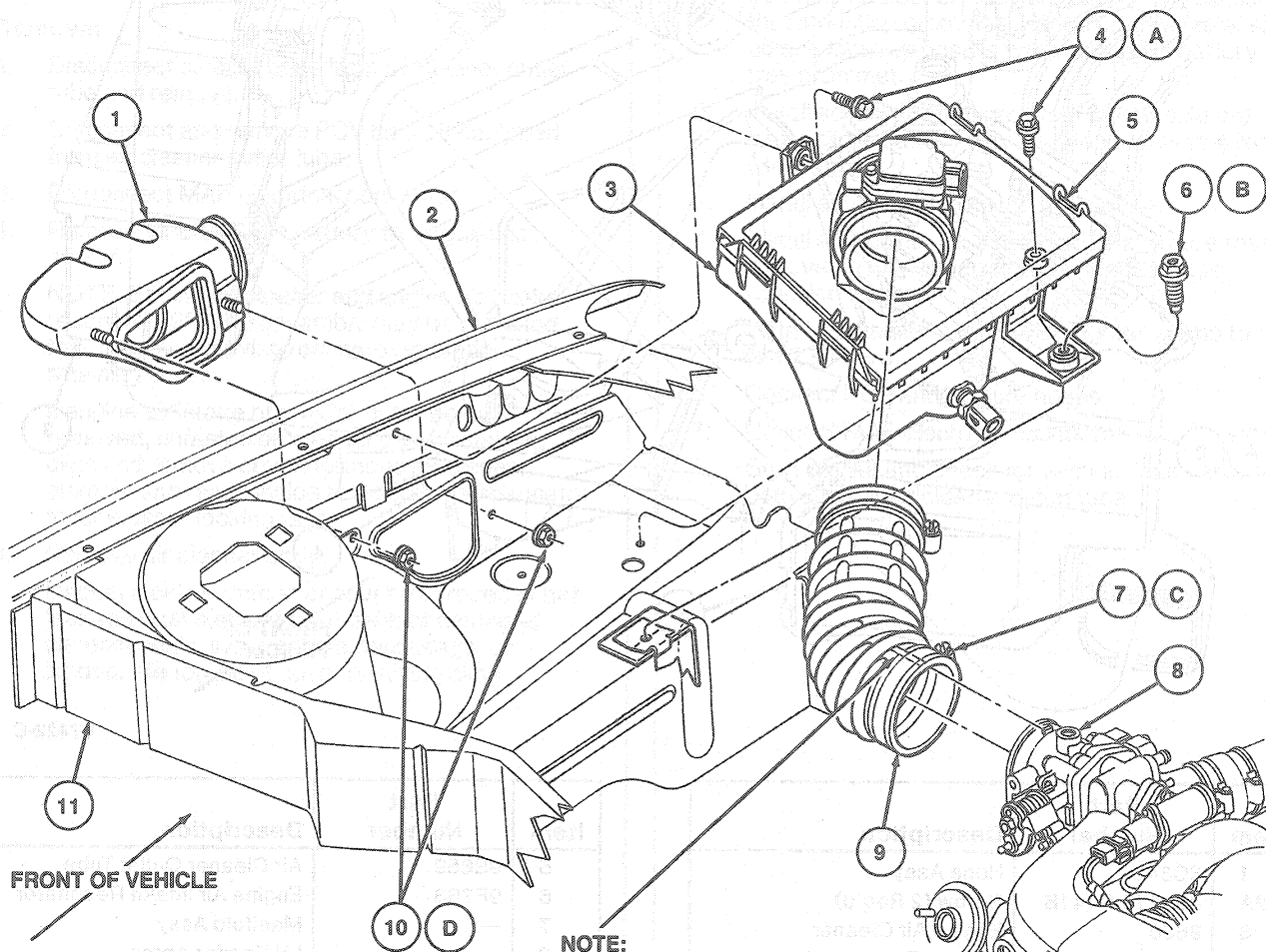
## REMOVAL AND INSTALLATION (Continued)

3. Install screw through rubber grommet (metal side up) into J-clip in battery tray.
4. Connect electrical connections to mass airflow (MAF) sensor jumper wire and intake air temperature (IAT) sensor.

## 3.0/3.2L SHO Engines

5. Connect air cleaner outlet tube and tighten clamp to 1.4-2.3 N·m (12-20 lb-in).

NOTE: Align white identification mark on air cleaner outlet tube assembly with tube stop on throttle body.



NOTE:  
ALIGN WHITE IDENTIFICATION  
MARK ON TUBE ASSY WITH  
TUBE STOP ON THROTTLE BODY

V7282-C

Item	Part Number	Description
1	9F763	Engine Air Intake Resonator
2	—	LH Fender
3	9600	Engine Air Cleaner
4A	N611061-S56	Screw
5	—	Air Cleaner Cover Retainer
6B	N605894-S141B	Bolt
7C	—	Clamp Assy (2 Req'd)
8	9E926	Throttle Body

(Continued)

Item	Part Number	Description
9	9B659	Air Cleaner Outlet Tube
10D	N621905-S56	Nut and Washer Assy
11	—	Cowl
A		Tighten to 12-18 N·m (9-13 Lb-Ft)
B		Tighten to 8-11 N·m (6-8 Lb-Ft)
C		Tighten to 1.4-2.3 N·m (12-20 Lb-In)
D		Tighten to 5-5.7 N·m (49-62 Lb-In)



## REMOVAL AND INSTALLATION (Continued)

## 3.8L Engine

Refer to Section 00-03 for the Emissions Systems Maintenance Schedule for frequency of filter inspection / replacement.

## Removal

1. Loosen engine air cleaner tube clamp (9C632) at engine air cleaner and disconnect engine air outlet tube.
2. Loosen four air cleaner cover assembly retaining screws until cover is free from air cleaner tray. Do not remove screws.

## 3.8L Engine

LIQUID SOAP  
(ESAM-186B), SURFACTANT  
(ESE-M99B44-A, CONCENTRATION  
0.5% MAX) OR WATER MAY BE  
USED TO AID INSTALLATION

NOTE: ALIGN ARROW WITH  
RIB ON THROTTLE BODY

NOTE: INSTALL TOP METER  
END OF TUBE ASSY TO  
MASS AIR FLOW SENSOR

FRONT OF  
VEHICLE

3. Remove air cleaner cover assembly. Remove filter element.

## Installation

1. Clean inside surfaces of air cleaner body. Install filter element.
2. Position air cleaner cover assembly on air cleaner tray. Tighten four retaining screws to 2.5-3.5 N-m (20-30 lb-in).
3. Install engine air outlet tube. Tighten clamps to 1.4-2.5 N-m (12-22 lb-in).

Item	Part Number	Description
1	12B601	Mass Air Flow Sensor and Bracket Assy
2	9B647	Engine Air Outlet Tube
3	9A673	Engine Air Cleaner Intake Tube and Duct
4A	N806215-S141B	Screw
5	9600	Engine Air Cleaner

(Continued)

Item	Part Number	Description
6	10732	Battery Tray
7B	9C632	Engine Air Cleaner Tube Clamp
8	9E926	Throttle Body
9	9B659	Air Cleaner Outlet Tube
A		Tighten to 4 N-m (36 Lb-In)
B		Tighten to 1.4-2.5 N-m (12-22 Lb-In)

V5639-E

## REMOVAL AND INSTALLATION (Continued)

**Air Inlet Resonator****3.0/3.2L SHO Engines****Removal**

1. Remove engine air cleaner as outlined.
2. Remove inner LH fender splash shield. Refer to Section 01-02.
3. Remove attaching nuts and remove engine air intake resonator assembly.

**Installation**

1. Install engine air intake resonator assembly to inner fender panel and install two attaching nuts. Tighten nuts to 5.5-7 N·m (49-62 lb-in).
2. Install inner LH fender splash shield. Refer to Section 01-02.
3. Install engine air cleaner as outlined.

**TORQUE SPECIFICATIONS (Cont'd)**

Description	N·m	Lb·In
Air Cleaner Assembly to Bracket—3.0L, 3.8L	2.7-5.4	24-47
Air Cleaner Adapter to Air Cleaner Lid	3.5	25
Resonator Assy to Inner Fender—3.0/3.2L SHO	5.5-7	49-62
Air Cleaner Assembly to Inner Fender—3.0L	12-18	9-13 (Lb·Ft)
Air Cleaner Assembly to Fender—3.0/3.2L SHO	8-11	6-8 (Lb·Ft)
Cover Assembly Screws—3.8L	2.5-3.5	20-30
Engine Air Cleaner Tube Clamp—3.8L	1.4-2.5	12-22
Air Cleaner Outlet Tube Clamp—3.0/3.2L SHO	1.4-2.3	12-20
Clean Air Flex Hose Clamp	4	36

**Mass Air Flow (MAF) Sensor****3.0L Engine****Removal**

1. Remove air cleaner outlet tube as outlined in this section.
2. Disconnect electrical connector from sensor.
3. Remove four retaining screws.
4. Carefully remove sensor. Discard gasket.

**Installation**

1. Position sensor with new gasket onto air cleaner cover.
2. Install four retaining screws. Tighten to 3.5 N·m (25 lb-in).
3. Install air cleaner outlet tube as outlined.
4. Connect electrical connector to sensor.
5. Start engine and check for vacuum leaks.

**PARTS CROSS-REFERENCE**

Base Part #	Part Name	Old Part Name
9600	Engine Air Cleaner	
9A673	Engine Air Cleaner Intake Tube and Duct	
9B647	Engine Air Outlet Tube	
9B659	Air Cleaner Outlet Tube	
9C632	Engine Air Cleaner Tube Clamp	
9E926	Throttle Body	
9F763	Engine Air Intake Resonator	

**SPECIFICATIONS****TORQUE SPECIFICATIONS**

Description	N·m	Lb·In
Air Cleaner Assembly-to-Bracket Screw	4	36
Shroud to Exhaust Manifold Nut	13.5-20.5	10-15 (Lb·Ft)

(Continued)

# SECTION 03-13 Evaporative Emissions

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## VEHICLE APPLICATION

Taurus/Sable, Taurus SHO and Taurus Flexible Fuel.

## DESCRIPTION AND OPERATION

### Fuel Vapor Emission Control System

As a part of the fuel system, vehicles are equipped with a fuel evaporative emission control system designed to meet federal and state requirements in effect at the time of production.

### Fuel Tank Evaporative Emission System

This system consists of:

- Sealed fuel tank and filler pipe
- Pressure/vacuum relief fuel filler cap
- Fuel tank vapor valve assembly with pressure relief and open flow to vacuum (Unleaded Gasoline Only)
- Vapor Control Valve (FF Only)
- Vapor tube, hoses and connectors
- Carbon canister (4 canisters for FF only)
- Purge solenoid (Vapor Management Valve (VMV) for FF only)

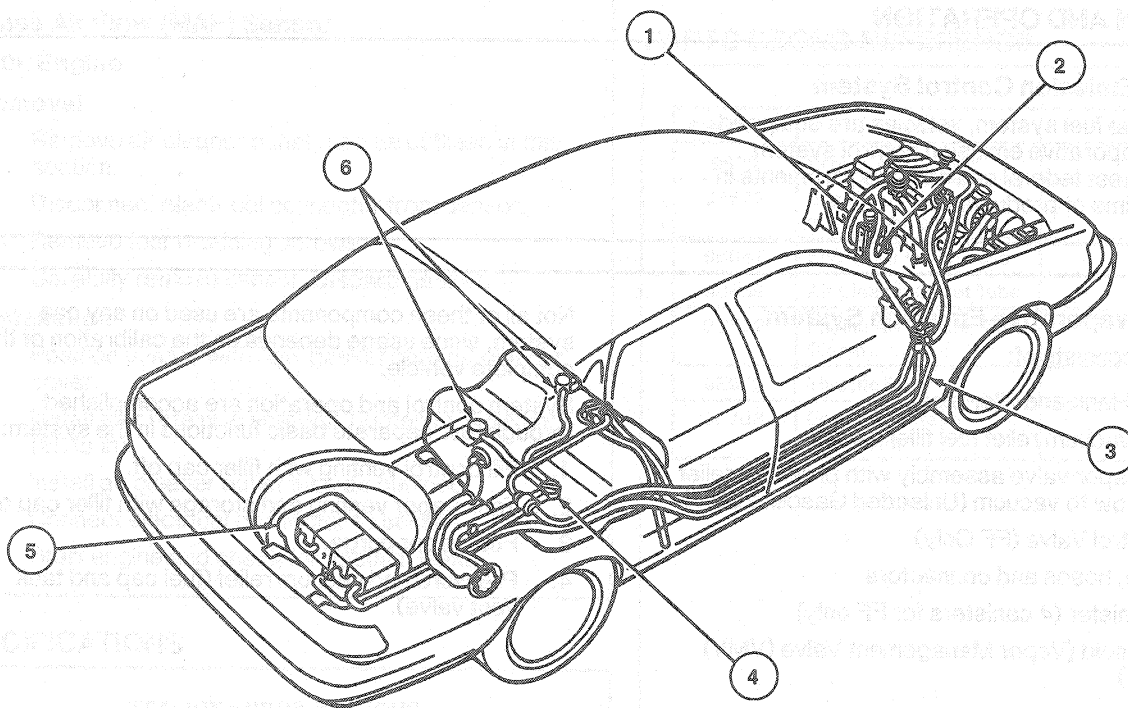
Not all of these components are used on any one system, since usage depends on the calibration of the complete vehicle.

System control and operation are accomplished through four separate basic functions in the system:

1. Fill control venting with filler cap off.
2. Tank vapor venting and storage with filler cap on.
3. Fuel vapor purge.
4. Pressure and vacuum relief (fuel cap and tank vent valve).

**DESCRIPTION AND OPERATION (Continued)****Fill Control/Vapor Vent System****Unleaded Gasoline Only**

Fill control is accomplished through a vent line, attached to the filler pipe, which extends inside the fuel tank. The small vapor orifice mounted in the top of the fuel tank and attached vapor line to the canister, control fuel tank fill by controlling pressure in the tank when the fuel level covers the fill vent opening in the tank. The vent system is designed to provide an air space, approximately 10 percent of the tank volume, above the fuel level in a full tank. The air space allows for thermal expansion of fuel and provides clearance between the fuel level and the vapor orifice and rollover valve assembly. The clearance is sufficient to allow vapor venting through the orifice under all static and most dynamic vehicle conditions.

**Flexible Fuel (FF) Evaporative Emission System**

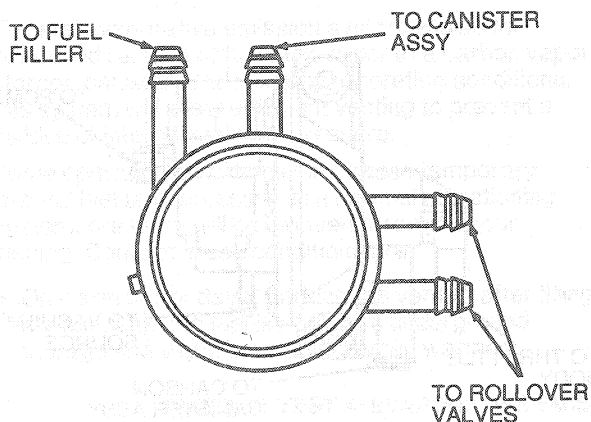
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Item	Part Number	Description
1	—	Vacuum Control Line
2	9C915	Vapor Management Valve
3	—	Canister Purge Line
4	9B190	Vapor Control Valve
5	9E857	Vapor Storage Canister Assy
6	9B593	Fuel Vapor Valve

## DESCRIPTION AND OPERATION (Continued)

**Vapor Control Valve**

The vapor control valve is located in the line between the vapor rollover valve and the carbon canisters. The vapor control valve is mounted on the fuel tank by a bracket. The vapor control valve senses filler cap removal by a change in pressure of the tank through a filler pipe sensing tube. The vapor control valve closes the flow path from the vapor rollover valves to the carbon canisters during refueling to prevent overfilling of the fuel tank.

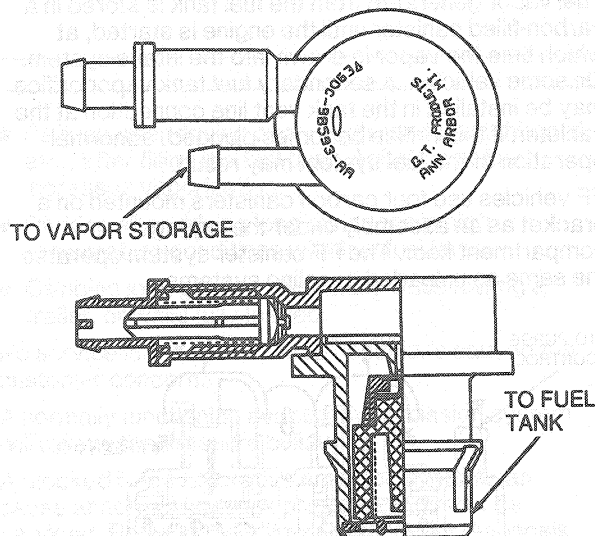


VAPOR CONTROL  
VALVE 9B190  
(FF ONLY)

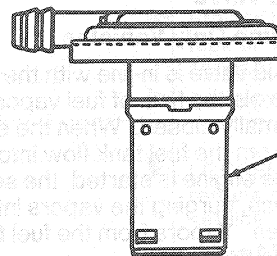
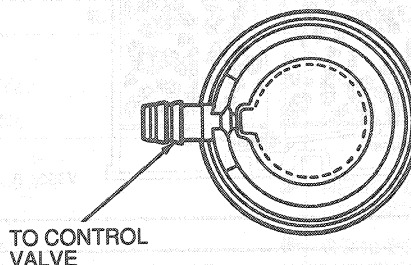
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**Fuel Tank Vapor Orifice, Pressure Relief and Rollover Valve Assembly**

The fuel tank vapor orifice, pressure relief and rollover valve assembly makes use of a small orifice and shutoff valve that tends to allow only fuel vapor, not liquid, to pass into the line routed forward to the vapor storage canister. This assembly mounts directly to the fuel tank, using a rubber grommet.

**Unleaded Gasoline Only**

V7539-B

**FF Only**TO FUEL  
TANK

V8559-A

Fuel vapors in the sealed tank are vented through the orifice in the top of the tank. The vapors are transmitted through a single vapor tube to the carbon canister at the front of the vehicle. A spring loaded poppet valve provides relief ahead of the orifice to the canister. This valve gradually opens above 5-6 kPa (20-25 inches H<sub>2</sub>O) to vent vapors to atmosphere through a second vapor tube.

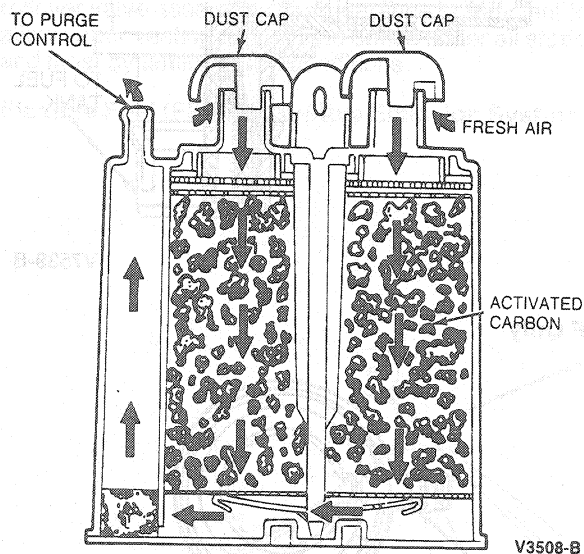


## DESCRIPTION AND OPERATION (Continued)

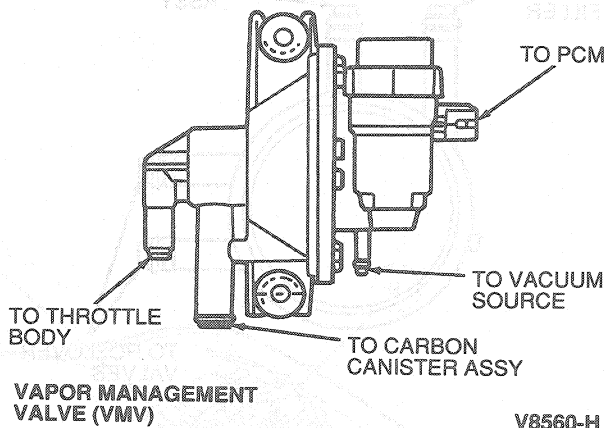
**Carbon Canister (Fuel Vapor Storage System)**

Fuel vapor generated from the fuel tank is stored in a carbon-filled canister until the engine is started, at which time the vapor is drawn into the intake system. On some vehicles, a secondary fuel tank vapor orifice may be installed in the tank vent line connection at the canister. If this orifice becomes plugged, abnormal operation of the fuel system may result.

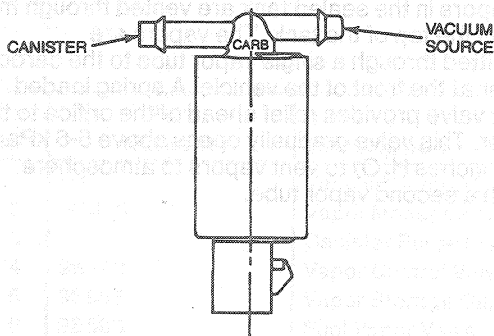
FF vehicles use four carbon canisters mounted on a bracket as an assembly under the luggage compartment floor. The FF canister system operates the same as unleaded gasoline systems.

**Vapor Management Valve****FF Vehicles Only**

The vapor management valve (VMV) is in-line with the carbon canister assembly and controls the flow of fuel vapors out of the canister assembly. The VMV closes off vapor flow from the canisters when the engine is not running. After the engine is started, in response to a signal from the powertrain control module (PCM) (12A650), the VMV opens and closes to allow vapors to flow from the canisters to the engine.

**Purge Solenoid Valve****Unleaded Gasoline Only Vehicles**

The purge solenoid valve is in-line with the carbon canister and controls the flow of fuel vapors out of the canister. It is normally closed. When the engine is shut off, vapors from the fuel tank flow into the canister. After the engine is started, the solenoid is engaged and opens, purging the vapors into the engine with the valve open. Vapors from the fuel tank are routed directly into the engine.

**Pressure and Vacuum Relief System****Sealed Fill Cap**

The fill cap is a sealed cap with a built-in pressure-vacuum relief valve. Fuel system vacuum relief is provided after negative 1.7 kPa (0.25 psi) and pressure relief above 14 kPa (2 psi). Under normal operating conditions, the fill cap operates as a check valve, allowing air to enter the tank as gasoline is used, while preventing vapors from escaping the tank through the cap.

## DIAGNOSIS AND TESTING

Refer to the Powertrain Control/Emissions Diagnosis Manual<sup>1</sup> for diagnosis of Engine Evaporative Emission System.

**Fuel Tank Evaporative Emission System**

The following is a diagnostic guide for check and/or servicing concerns of internal fuel tank pressure buildup or fuel odor. A typical concern may be a rush of air as the fuel cap is removed.

The fuel evaporative emission system allows for controlled release of fuel tank vapor to a carbon vapor storage canister. Under normal operating conditions, this system will allow sufficient venting to prevent a buildup of internal fuel tank pressure.

Some operating conditions may cause temporary internal fuel tank pressure. In a normally functioning system, pressure will be relieved through vapor venting. Some of these conditions are:

- On warm or hot days, parking the vehicle after filling the fuel tank, the fuel is cool from underground storage and vaporizes rapidly when warmed.

- Parking after driving over rough roads, washboard, etc., after filling the fuel tank. Agitation of fuel increases vaporization.
- Parking after driving long distances in high temperature conditions with low fuel level.
- Climbing long grades, especially while towing a trailer, or while fully loaded.

No service is required if these conditions caused the customer concern.

A normally functioning evaporative emission system will relieve the pressure buildup.

A blocked fuel evaporative emission system can cause abnormal fuel tank pressure and must be serviced. Refer to the following charts for diagnosis and flow test.

**PINPOINT TEST A: EVAPORATIVE EMISSIONS DIAGNOSIS (UNLEADED GASOLINE ONLY)**

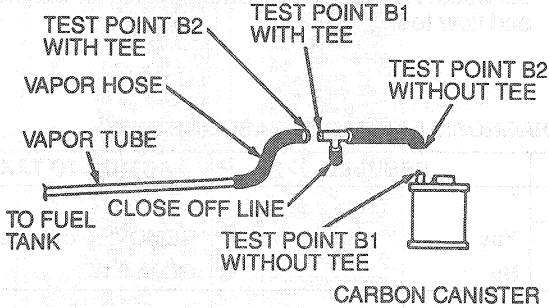
TEST STEP		RESULT	ACTION TO TAKE
<b>A1</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>● Test canister hose and inlet nipple for blockage.</li> <li>● Are hoses or inlet blocked?</li> </ul>	Yes No	REMOVE blockage. GO to B1.
<b>A2</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>● Test fuel evaporative emission system for blockage.</li> <li>● Are all system passages open?</li> </ul>	Yes No	REMOVE blockage or REPLACE component. GO to B2.
<b>A3</b>	<b>VISUAL INSPECTION</b>		
	<ul style="list-style-type: none"> <li>● Inspect vapor tube and hoses for kinks or pinched areas.</li> <li>● Are tube or hoses kinked or pinched?</li> </ul>	Yes No	SERVICE or REPLACE tube or hoses. VERIFY service. GO to A4.
<b>A4</b>	<b>VISUAL INSPECTION</b>		
	<ul style="list-style-type: none"> <li>● Inspect vapor hose routing between fuel tank and body for pinch.</li> <li>● Is vapor hose pinched?</li> </ul>	Yes No	LOOSEN fuel tank and reroute hose. VERIFY service. GO to A5.
<b>A5</b>	<b>VISUAL INSPECTION</b>		
	<ul style="list-style-type: none"> <li>● Remove fuel tank.</li> <li>● Remove vapor separator valve.</li> <li>● Inspect valve for open air passage through orifice.</li> <li>● Is air passage open?</li> </ul>	Yes No	INSTALL valve in tank. INSTALL tank system test complete. REPLACE valve. VERIFY service.

TV3507H

<sup>1</sup> Can be purchased as a separate item.

## DIAGNOSIS AND TESTING (Continued)

## PINPOINT TEST B: FLOW TEST—FUEL EVAPORATIVE SYSTEM (UNLEADED GASOLINE ONLY)

TEST STEP	RESULT	ACTION TO TAKE
<b>B1 FLOW TEST</b> <b>CAUTION: Do not use other high pressure air supplies. Will result in damage to canister.</b> <ul style="list-style-type: none"> <li>Install hand pump and pressure gauge Rotunda 021-00014 Vacuum and Pressure Tester or equivalent in vapor hose at test point B1.</li> <li>Hand pump to a maximum of 17.2 kPa (2.5 psi).</li> </ul>	Pressure drop: Drops to zero immediately Holds pressure or leaks down slowly	System flow OK, no servicing required. <b>PERFORM Pinpoint Test Step A3.</b>
<b>B2 FLOW TEST</b> <b>CAUTION: Failure to remove fuel cap may result in damage to fuel tank.</b> <ul style="list-style-type: none"> <li>Remove fuel cap from fuel filler pipe.</li> <li><b>CAUTION: Do not use other high pressure air supplies. May result in damage to fuel tank.</b></li> <li>Install hand pump and pressure gauge onto tee or canister nipple at test point B2.</li> <li>Hand pump to a maximum of 17.2 kPa (2.5 psi).</li> </ul>  <p>TEST POINT B2 WITH TEE TEST POINT B1 WITH TEE TEST POINT B2 WITHOUT TEE VAPOR HOSE VAPOR TUBE TO FUEL TANK CLOSE OFF LINE TEST POINT B1 WITHOUT TEE CARBON CANISTER</p> <p>V7578-A</p>	Pressure drop: Drops to zero immediately Holds pressure or leaks down slowly	System OK, no servicing required. <b>PERFORM Pinpoint Test Step A4.</b>

TV7541C

## PINPOINT TEST A: EVAPORATIVE EMISSIONS DIAGNOSIS (FLEXIBLE FUEL ONLY)

TEST STEP	RESULT	ACTION TO TAKE
<b>A1 FUNCTIONAL TEST</b> <ul style="list-style-type: none"> <li>With the fuel level below 1/2 tank, disconnect carbon canister assembly vapor supply line at canister assembly.</li> <li>Plug the vapor supply line.</li> <li>Using Stant Fuel System Pressure Tester SFT-265, pressurize the fuel system through the test fuel cap.</li> <li>Remove plug from the canister assembly vapor supply line.</li> <li><b>Did the fuel system pressure decay?</b></li> </ul>	Yes No	GO to A2. GO to B1.
<b>A2 FUNCTIONAL TEST</b> <ul style="list-style-type: none"> <li>Disconnect the vapor control valve signal line from the fuel fill tube.</li> <li>Plug the signal line at the fuel fill tube.</li> <li>Plug the carbon canister assembly vapor supply line at canister assembly.</li> <li>Pressurize the fuel system.</li> <li>Remove plug from the canister assembly vapor supply line.</li> <li><b>Did the fuel system pressure decay?</b></li> </ul>	Yes No	REPLACE the vapor control valve. VERIFY service. GO to C1.

## DIAGNOSIS AND TESTING (Continued)

## PINPOINT TEST B: EVAPORATIVE EMISSIONS DIAGNOSIS (FLEXIBLE FUEL ONLY)

TEST STEP		RESULT	ACTION TO TAKE
<b>B1</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>Remove vapor line from rear rollover valve at vapor control valve.</li> <li>Did the fuel system pressure decay?</li> </ul>	Yes No	GO to B2. GO to D1.
<b>B2</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>Connect vapor line from rear rollover valve to vapor control valve.</li> <li>Pressurize the fuel system.</li> <li>Remove vapor line from front rollover valve at vapor control valve.</li> <li>Did the fuel system pressure decay?</li> </ul>	Yes No	REPLACE the vapor control valve. VERIFY service. REPLACE front rollover valve and grommet. VERIFY service

## PINPOINT TEST C: EVAPORATIVE EMISSIONS DIAGNOSIS (FLEXIBLE FUEL ONLY)

TEST STEP		RESULT	ACTION TO TAKE
<b>C1</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>Remove vapor line from rear rollover valve at vapor control valve.</li> <li>Did the fuel system pressure decay?</li> </ul>	Yes No	GO to C2. GO to D1.
<b>C2</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>Connect vapor line from rear rollover valve to vapor control valve.</li> <li>Pressurize the fuel system.</li> <li>Remove vapor line from front rollover valve at vapor control valve.</li> <li>Did the fuel system pressure decay?</li> </ul>	Yes No	System OK, no servicing required. REPLACE front rollover valve and grommet. VERIFY service.

## PINPOINT TEST D: EVAPORATIVE EMISSIONS DIAGNOSIS (FLEXIBLE FUEL ONLY)

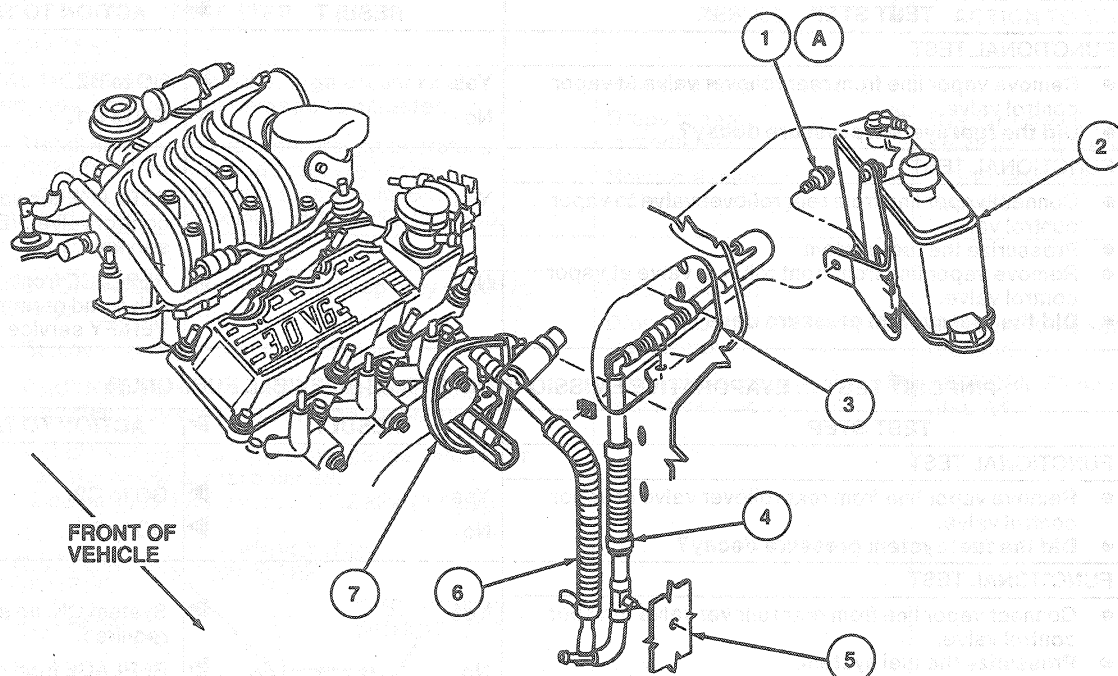
TEST STEP		RESULT	ACTION TO TAKE
<b>D1</b>	<b>FUNCTIONAL TEST</b>		
	<ul style="list-style-type: none"> <li>Remove vapor line from front rollover valve at vapor control valve.</li> <li>Did the fuel system pressure decay?</li> </ul>	Yes No	REPLACE rear rollover valve and grommet. VERIFY service. REPLACE both rollover valves and grommets. VERIFY service.

## REMOVAL AND INSTALLATION

Most component parts of the standard fuel system are retained by a simple nut, bolt or screw. Refer to individual system illustrations for specific part references.

## REMOVAL AND INSTALLATION (Continued)

## Evaporative Emission System, 3.0L (Unleaded Gasoline Only)



V7755-A

Item	Part Number	Description
1A	N606688-S2	Screw and Washer Assy
2	9E857	Canister and Bracket Assy
3	—	LH Headlamp Opening
4	9K313	Fuel Vapor Front Hose

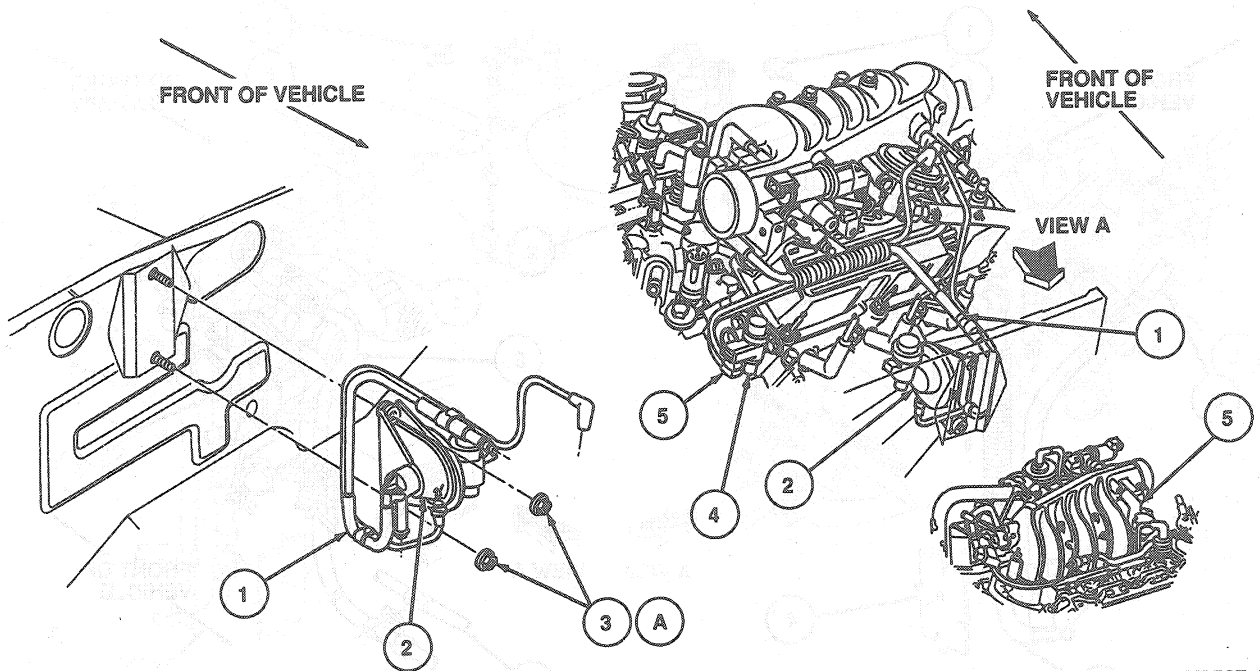
(Continued)

Item	Part Number	Description
5	—	Radiator Support
6	9C987	Hose and Valve Assy
7	—	Tie Strap
A		Tighten to 21.2-28.8 N-m (15-21 Lb-Ft)



## REMOVAL AND INSTALLATION (Continued)

## Evaporative Emission System 3.0L (FF Only)



V8567-A

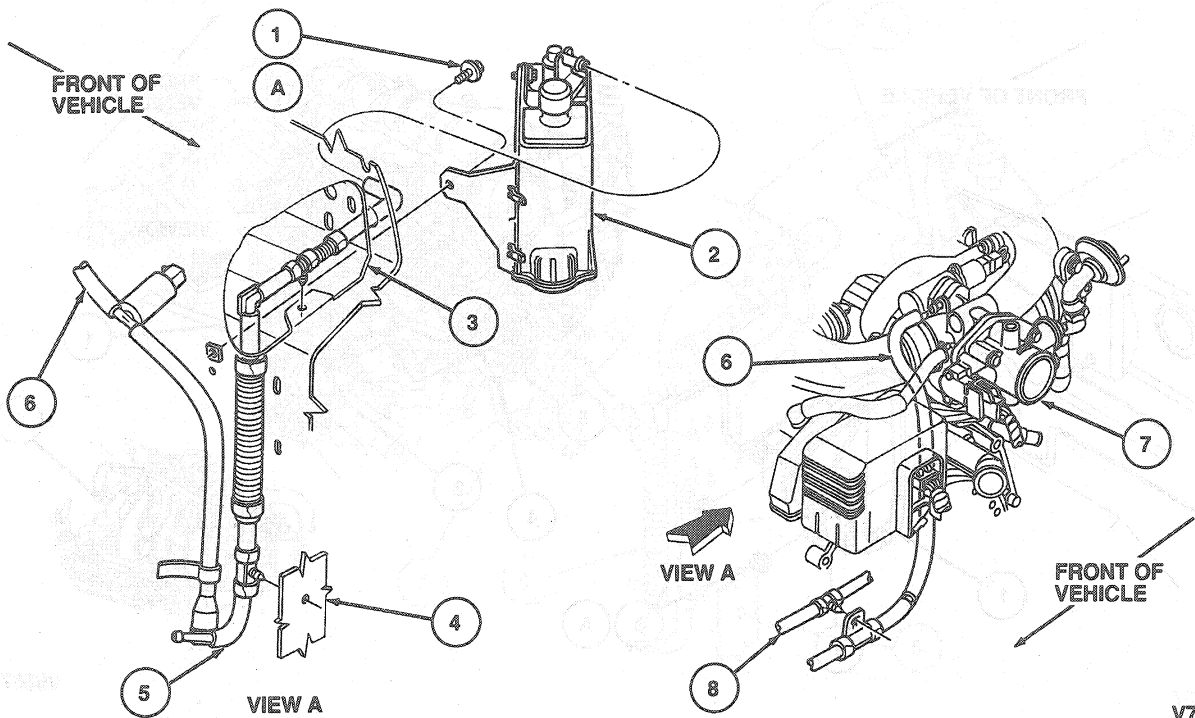
Item	Part Number	Description
1	9E498-EC	Main Emission Vacuum Control Connector
2	9C915	Fuel Vapor Canister Purge Regulator Valve
3A	N621905-S8	Nut and Washer Assy (2 Req'd)

(Continued)

Item	Part Number	Description
4	9J472	EGR Vacuum Regulator Bracket
5	93498-DD	Main Emission Vacuum Control Connector
A		Tighten to 6-11 N·m (53-97 Lb·in)

REMOVAL AND INSTALLATION (Continued)

Evaporative Emission System, 3.0L SHO



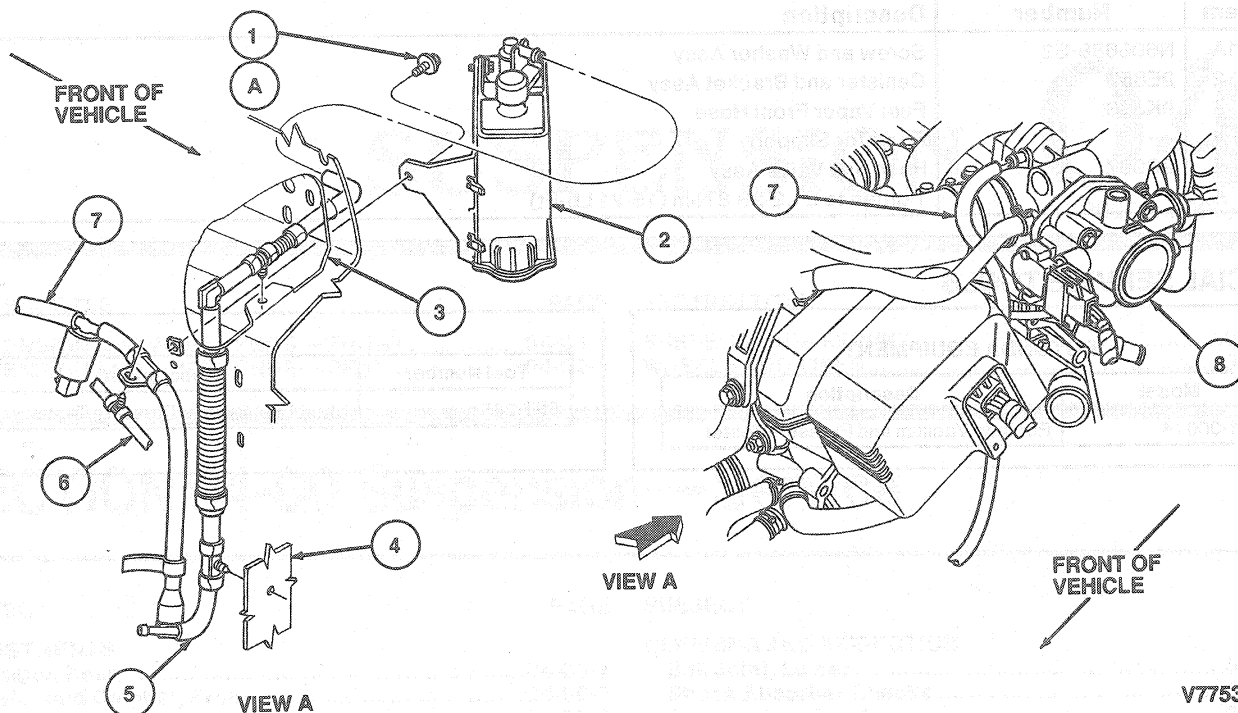
Item	Part Number	Description
1A	N606688-S2	Screw and Washer Assy
2	9E857	Canister and Bracket Assy
3	—	LH Headlamp Opening
4	—	Radiator Support

(Continued)

Item	Part Number	Description
5	9K313	Fuel Vapor Front Hose
6	9C987	Hose and Valve Assy
7	9E926	Throttle Body
8	—	Battery Cable
A		Tighten to 21.2-28.8 N·m (15-21 Lb·Ft)

## REMOVAL AND INSTALLATION (Continued)

## Evaporative Emission System, 3.2L SHO

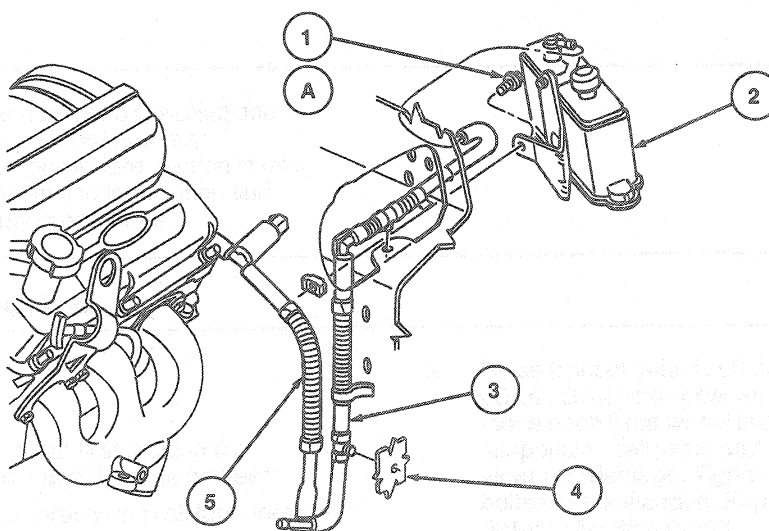


Item	Part Number	Description
1A	N606689-S2	Screw and Washer Assy
2	9E857	Canister and Bracket Assy
3	—	LH Headlamp Opening
4	—	Radiator Support

(Continued)

Item	Part Number	Description
5	9K313	Fuel Vapor Front Hose
6	—	Battery Cable
7	9C987	Hose and Valve Assy
8	9E926	Throttle Body
A		Tighten to 21.2-28.8 N·m (15-21 Lb·Ft)

## Evaporative Emission System, 3.8L



## REMOVAL AND INSTALLATION (Continued)

Item	Part Number	Description
1A	N606688-S2	Screw and Washer Assy
2	9E857	Canister and Bracket Assy
3	9K313	Fuel Vapor Front Hose
4	—	Radiator Support
5	9C987	Hose and Valve Assy
A		Tighten to 21.2-28.8 N·m (15-21 Lb·Ft)

## SPECIAL SERVICE TOOLS

## ROTUNDA EQUIPMENT

Model	Description
021-00014	Rotunda Vacuum and Pressure Tester

Tool Number	Description
SFT-265	Stant Fuel System Pressure Tester