



PRODUCT RECALL BULLETIN

Bulletin: 95-03-06

Reference: 43

Date: 9-95

Subject: SAFETY RECALL AMG-95-02 FUEL TANK VENTING

Models Affected: All 1995 Gas Engine Equipped Hummer Vehicles Built Through VIN SE167630

Under certain operating conditions—high ambient temperatures (greater than 95° F) and fuel tank level between 1/4 and 1/2 full—the rate of vapor generation may exceed the capacity of the current fuel tank venting system to process these vapors. Fuel tank internal pressure can increase, and cause tank expansion, which in turn results in interference between the fuel tank protective shield and the rear propeller shaft. Continued operation under these conditions will result in a hole in the fuel tank at the point of shield-to-shaft contact.

A supplemental venting system kit, has been developed to eliminate the condition.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory or demonstrator vehicle status. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory.

Temporary relief of tank pressure can be achieved by slowly loosening the fuel filler cap, venting pressure, and retightening the cap.

Owners of affected 1995 vehicles will be contacted and requested to make arrangements with their local Dealer to receive this service on their vehicle.

Instructions and installation procedures for the vent kit are included in this bulletin. Kit part number is 05744421.

The time required for kit installation is 0.9 hours (Labor Operation 50306, Warranty type J, complaint code R9502).

Kit installation is to be performed at no cost to the owner.



INSTALLATION INSTRUCTIONS FOR FUEL TANK VENT KIT 05744421

Parts included in kit 05744421 are:

<u>PART NAME</u>	<u>PART NUMBER</u>	<u>QTY.</u>
Connector, hose, 90° elbow, 3/8 Barb	06007420	1
Connector, hose, 90° elbow, 5/16 Barb	06007421	1
Hose, 5/16 x 2-7/8"	06007427	1
Clamp, hose	11608950 1	2
Decal, recall completion	06006457	1
Bracket, shield mounting	06007435 B2	1
Shield, protective	06007431 B2	1
Installation Instructions	05744422	1
Bolts, 1/4 - 20 x .75 in.	MS 00090725 6P2	4
Washer, lock, 1/4 medium	MS 00035338 44P2	4
Washer, flat, 1/4	G 02436161 P2	4
Washer, lock, #10	MS 00035338 43	4
Assembly, connector hose	05744426	1
Assembly, supplemental rollover/relief valve	05744427	1
Male Branch Tee	06007437	1
Connector, male 3/8 NPTF	8 6-100102 BA	1

Shop material required but not included in kit are:

Loctite PST thread sealant

Liquid soap (detergent) such as Palmolive, Joy, etc.

Installation Instructions

1. Loosen fuel filler cap to release pressure.
2. Raise vehicle about two feet on hoist for easier access.
3. Remove vapor canister shield. Discard shield as it will not be reused. Retain screws and flat washers.
4. Clear away excess underbody sealer from above vapor canister if necessary.
5. Disconnect canister center hose from filler housing. Remove and discard fitting in filler housing (Figure 2).
6. Disconnect rollover valve hose at canister. Retain hose clamp as it will be reused. Note that rollover valve hose is connected to canister outlet closest to passenger compartment.
7. Attach connector hose assembly to vapor canister as follows (Figure 1):
 - a. Apply liquid soap to barbed end of tee and install existing rollover valve hose on barbed end of tee in connector hose assembly (Figure 1). Push hose onto connector until fully seated.
 - b. Position original hose clamp on short hose that goes to canister (Figure 1).
 - c. Connect short hose of connector assembly to canister outlet closest to passenger compartment. Lubricate canister plastic fitting with liquid soap to ease installation. Secure hose to canister with original hose clamp. Be sure hose is fully seated before tightening clamp.

8. Install male branch tee and plastic elbow fittings as follows (Figure 3):
 - a. Apply Loctite PST to male threads of branch tee and install tee in filler housing (Figure 3). Tighten tee securely, then back it off about 45°, or enough to install elbow fittings.

NOTE: In its final position the male branch tee minus the 90 degree elbows should have its forward port aimed at the driver's side front corner and the rearward port aimed at the passenger's side rear corner of the vehicle.

- b. Install elbow fitting with 3/8 barb into branch tee. This fitting goes toward front of vehicle (Figure 3). Install fitting into tee dry. Do not use sealer. Position fitting so it is horizontal and aligned with center outlet on canister.
- c. Install elbow fitting with 5/16 barb into branch tee. Install this fitting dry also. Do not use sealer. Position fitting so barb end is horizontal.
- d. Retighten branch tee to final position.

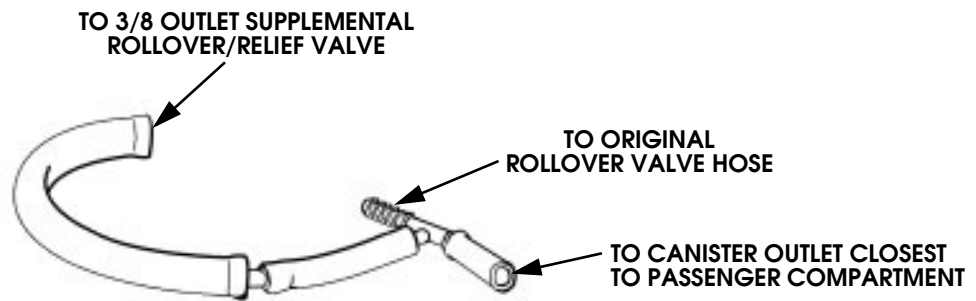


Figure 1 Connector Hose Assembly

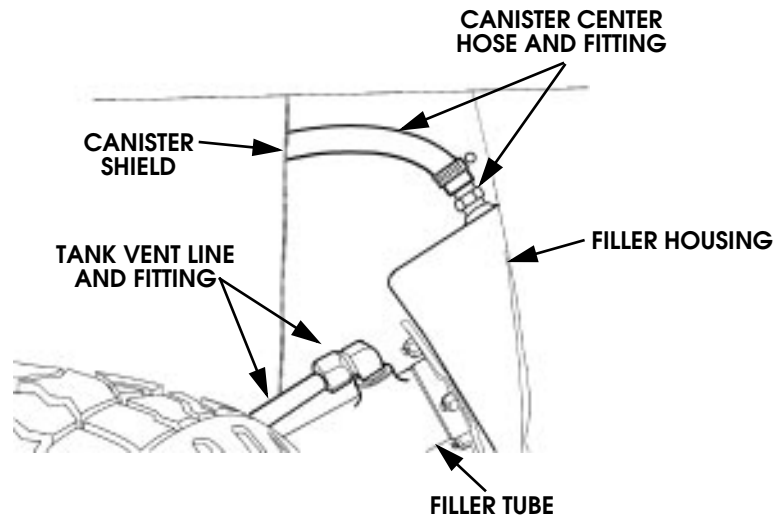


Figure 2 Original Hose and Line to be Disconnected

9. Disconnect tank vent line at filler tube fitting (Figure 2). Discard filler tube fitting as it will not be reused.
10. Install supplemental rollover/relief valve assembly as follows (Figure 4):
 - a. Apply Loctite PST to male threads of male street tee in valve assembly.
 - b. Install valve assembly into filler tube. Position valve as shown (Figure 4).
 - c. Tighten valve assembly street tee so that tank vent line port is parallel with filler tube (Figure 4).
 - d. Apply liquid soap to 3/8 barb of elbow fitting in branch tee installed in Step 8. Push canister center hose completely onto fitting as shown (Figure 3).
 - e. Attach 5/16 diameter hose (from kit) to 5/16 nipple on supplemental rollover/relief valve with hose clamp (from kit) and to 5/16 barb of fitting in branch tee (Figures 3 and 4). Use liquid soap on plastic barbs.
 - f. Attach 3/8 diameter hose from connector hose assembly to 3/8 barbed end on supplemental rollover/relief valve. Secure with hose clamp (from kit). Rollover valve can be rotated in grommet for alignment purposes.

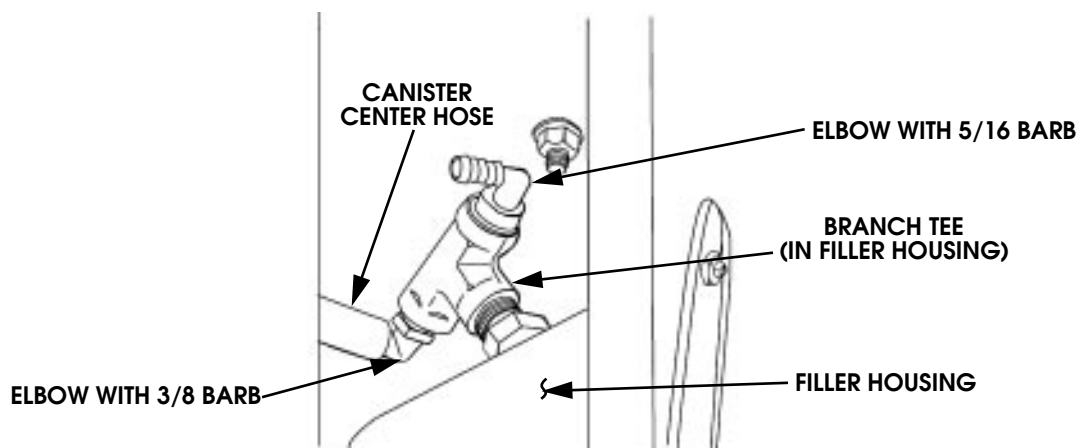


Figure 3 Branch Tee Installation

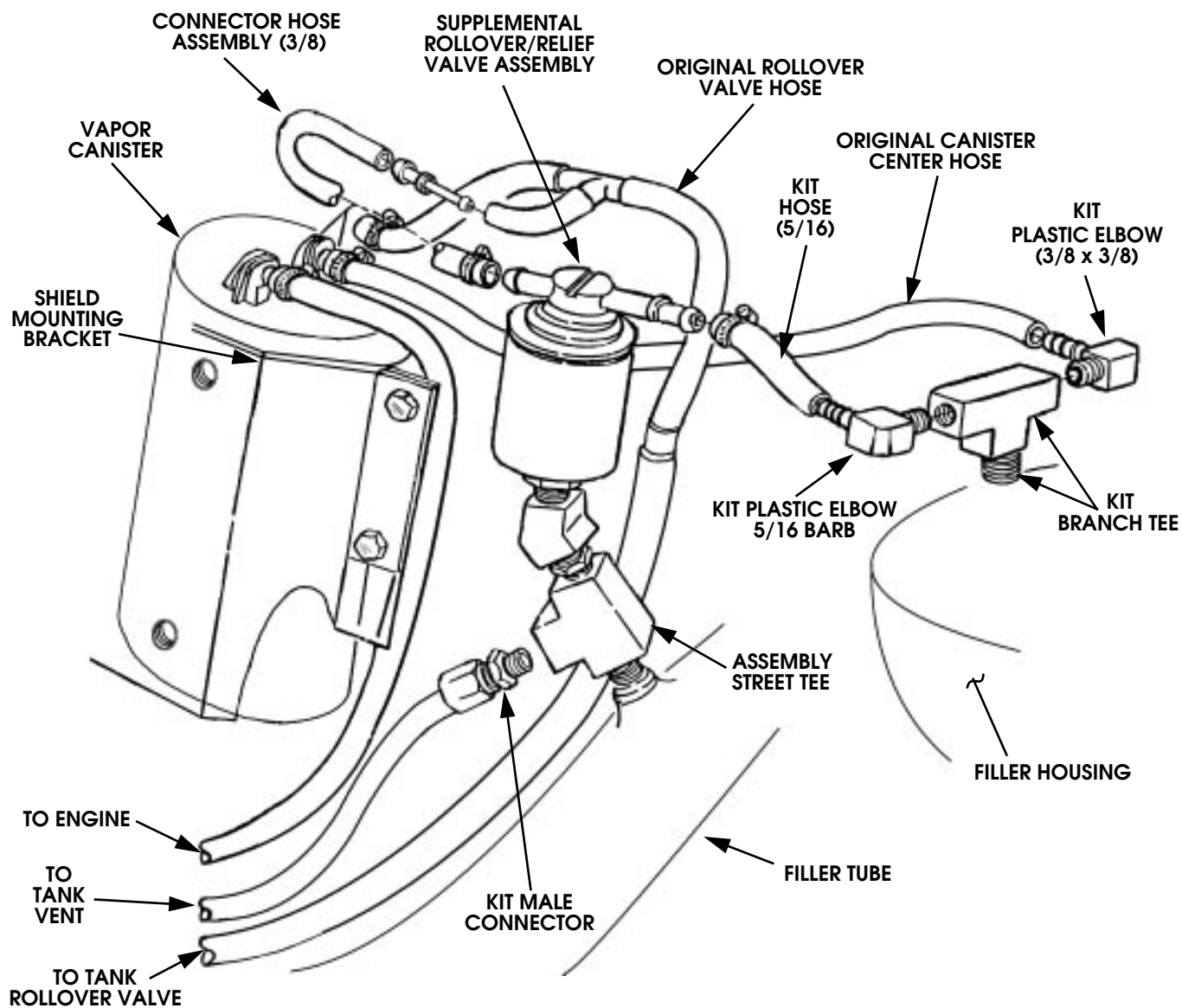


Figure 4 Hose, Valve, and Tee Connections

11. Connect tank vent line to supplemental rollover relief valve assembly as follows (Figure 4):
 - a. Remove old fitting nut and ferrule (if used) from vent line.
 - b. Install nut and ferrule from 3/8 male connector supplied with kit onto vent line.
 - c. Apply Loctite PST to connector threads and install male connector in street tee of new valve assembly (Figure 4).
 - d. Connect tank vent line to male connector and tighten securely.
12. Verify correct hose connection (Figure 4). Be sure hoses are fully seated onto fittings and are properly routed. Hoses *must not* be kinked, twisted, or routed so supplemental valve becomes cocked in valve holder. Reroute hoses if needed.
13. Install shield mounting bracket (Figure 5). Secure bracket with original #10 screws, flatwashers removed in Step 3, and new lockwashers from kit.
14. Attach protective shield to mounting bracket with 1/4 - 20 bolts, lockwashers, and flatwashers from kit.
15. Affix campaign completion label to protective shield (Figure 5). Then cover label with clear plastic overlay (provided with label).
16. Lower vehicle and return it to owner or to stock.

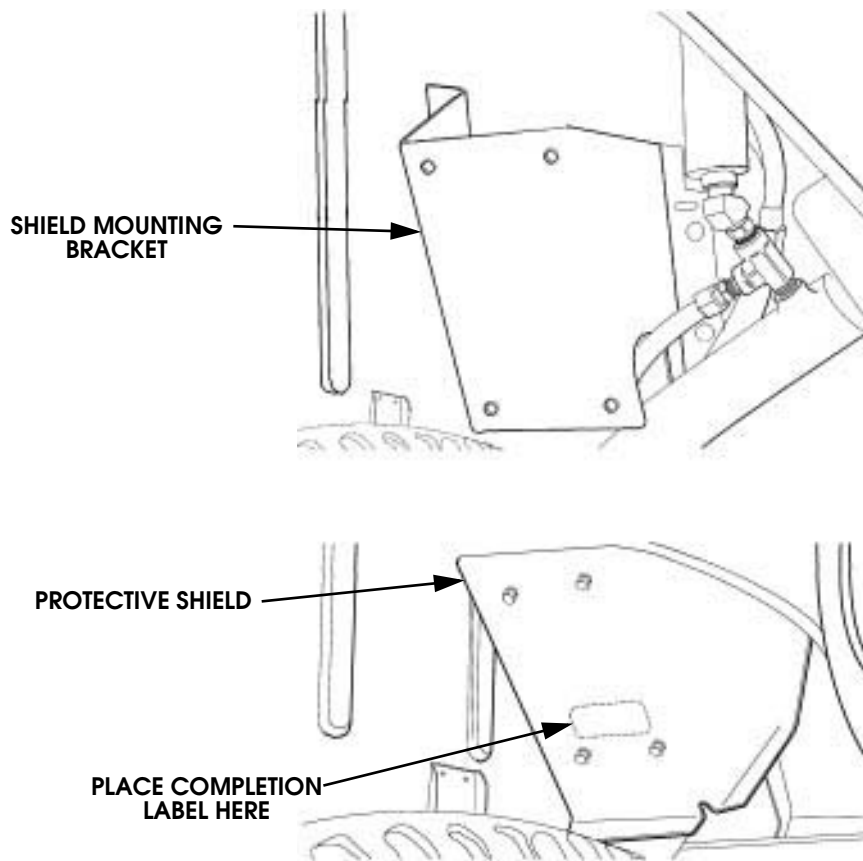


Figure 5