

	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

Speedster / VX 220 – Vacuum Hose

Symptom description:

Brake servo vacuum hose could split and crack.

Cause:

Insufficient ozone resistance of cover material.

Scope:

Speedster / VX220 – MY 2001-2003

Model	Plant	From	To
Speedster / VX 220	Lotus	1 N 000001	3 N 007399

Only vehicles listed in the VIN information files have to be reworked.

Remedy:

Check if vehicle has been reworked (see vehicle marking). If required, replace vacuum hose of brake booster according to following rework instruction.

Parts:

Qty	Part Name	Part No.	Cat. No.
1	Vacuum hose (LHD)	93 188 759	48 01 790
1	Vacuum hose (RHD)	93 188 760	48 01 791

Vehicle Marking:

All vehicles checked or reworked according to this information have to be clearly marked by a green paint dot on the top of the brake servo.

Warranty Claim Information:

Labour codes mentioned below are accepted until 30. Sep 2008.

Number	Labour Description	TC	Hrs	AW
T 1077 00	Replace vacuum hose brake booster	92	1.7	21
T 1077 70	Vehicle already reworked	92		
T 1077 80	Customer cannot be reached	92		
T 1077 90	Vehicle stolen or scrapped	92		

Set-up time: Use normal procedures. For customer notification it is allowed to claim an administrative fee of Euro 3.65 (or local equivalent).

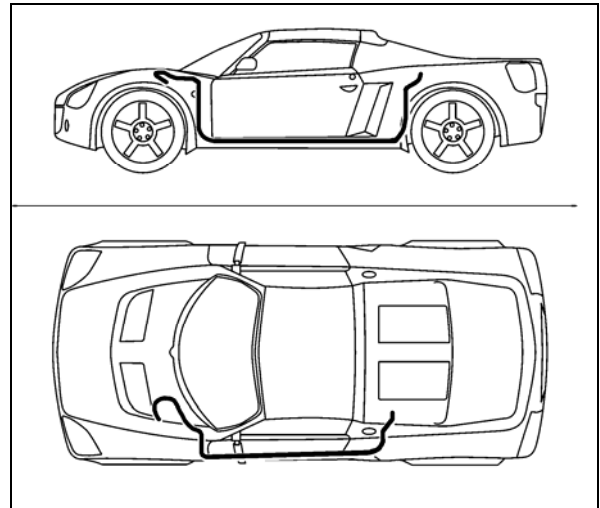
	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

Rework Details:

Following Instruction describes the replacement of the vacuum hose for vehicles equipped with Z22SE engine and left-hand drive. Vehicles equipped with Z20LET engines and/or right-hand drive should be treated similarly.

The illustration shows the run of the vacuum hose that has to be changed.

The vacuum hose is routed from the intake manifold in the engine compartment trough the side sill to the brake booster in the front compartment.



Remove

1. Remove undertray
 - see working procedure „Undertray, Remove and Install“, Group „A“, Service-Instruction Speedster / VX 220
 - Document-Number **00031480**
2. Open engine compartment

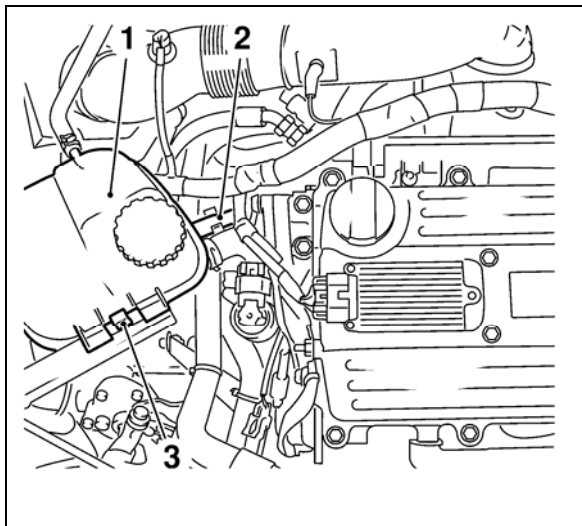


Customer Satisfaction Program

Ref. Number:	06-R-008
TIS-Group:	H
Release Date:	21 Aug 2006
Revision:	01

3. Uncover vacuum hose (2)

- Detach coolant reservoir (1)
 - Remove clip (3)
 - Detach wiring harness connector
 - Lay reservoir aside

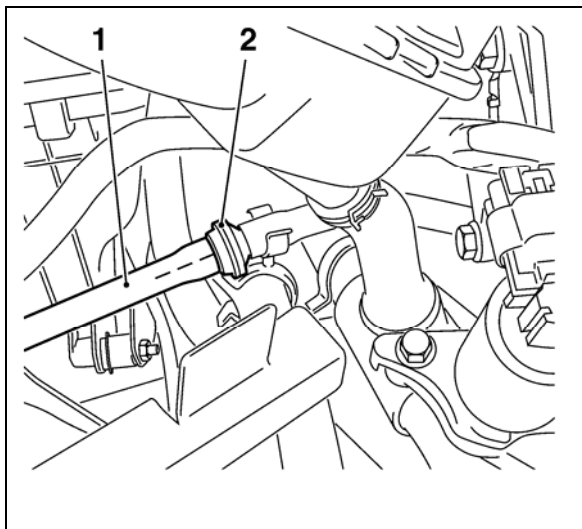


4. Detach vacuum hose (1) behind non-return valve (2)

Note:

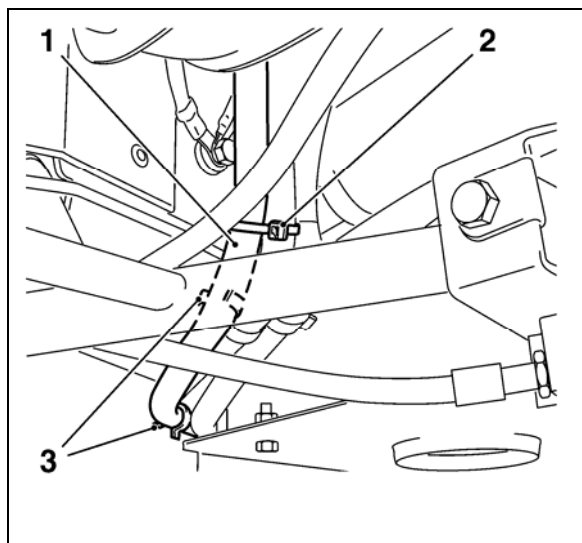
Cut vacuum hose carefully at dotted line

5. Raise vehicle



6. Dismantle vacuum hose (1)

- Remove 2x clip (3)
- Remove cable strap (2)



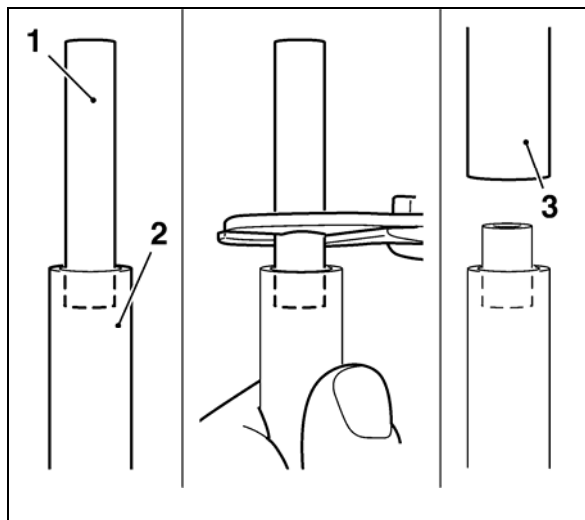
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	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

7. Attach new vacuum hose (2) to old vacuum hose (3)

- Bond connecting hose (1, for instance 60 mm of fuel hose PN 90 543 673 / Cat.No 8 22 369) with adhesive (for instance PN 93 165 228 / Cat.No 15 00 006) approximately 10 mm into new vacuum hose.
- Shorten connector hose after drying of adhesive to approximately 10 mm
- Connect and disconnect both vacuum hoses for expanding
- Bond connector hose with adhesive completely to old vacuum hose
- Make manual pulling test after 1 minute to ensure that bonding is complete



Install

- Lubricate new vacuum hoses completely with silicone oil
- Lower vehicle
- Remove door sill plate – left side

- Detach 3x clip

Note:

Door sill plate is mounted to door sill with double faced adhesive tape.

- Remove instrument housing

- see working procedure „Instrument Housing, Remove and Install“, Group „N“, Service Instruction Speedster/VX220
 - Document-Number **00031714**

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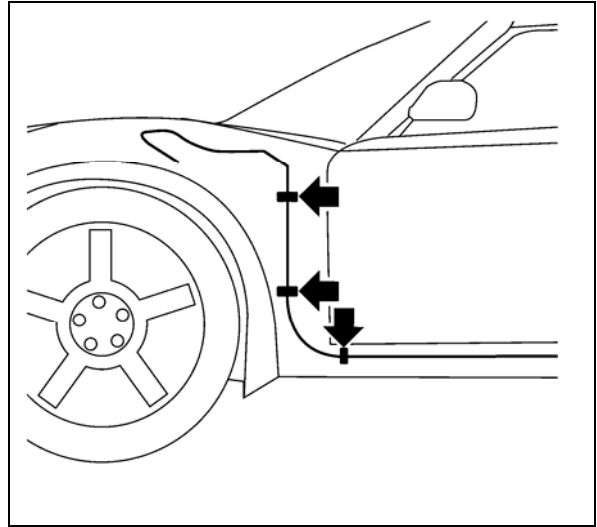
	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

12. Detach old vacuum hose

- Unclip 3x vacuum line (see picture)

Note:

Reach trough aperture in side sill to unclip vacuum hose

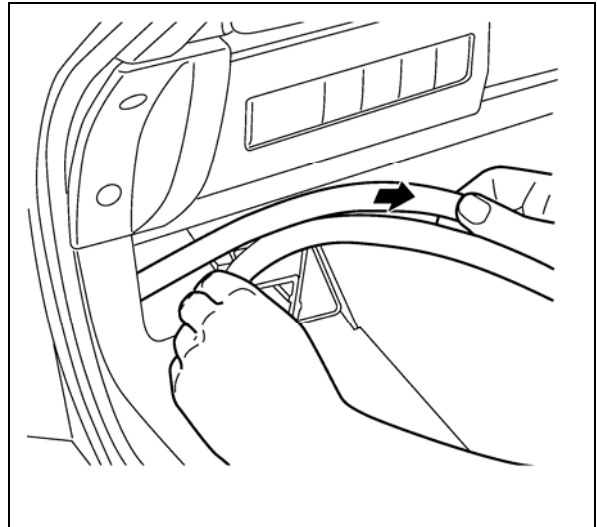


13. Pull new vacuum hose trough aperture in side sill in direction of arrow

- Second technician required to guide vacuum hose trough left hand side sill

Important:

Do not pull the end of the vacuum hose into the side sill



14. Wet old vacuum hose with silicone oil

	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

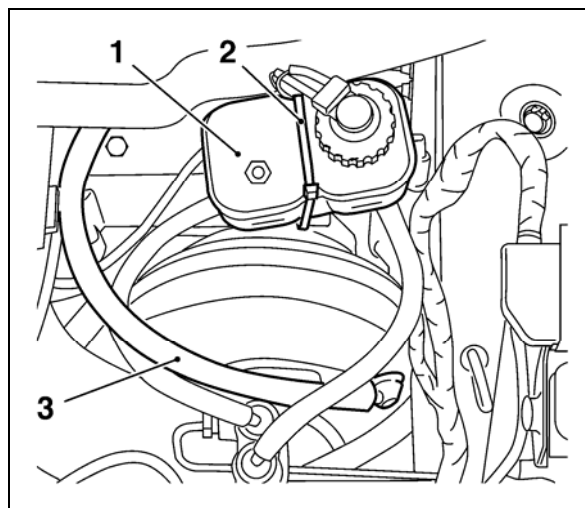
15. Detach brake fluid reservoir (1)

Important:

Brake fluid feed line can slide easily out of brake fluid reservoir.

- remove cable strap (2)
- put brake fluid reservoir aside

16. Remove vacuum hose (3) from brake booster



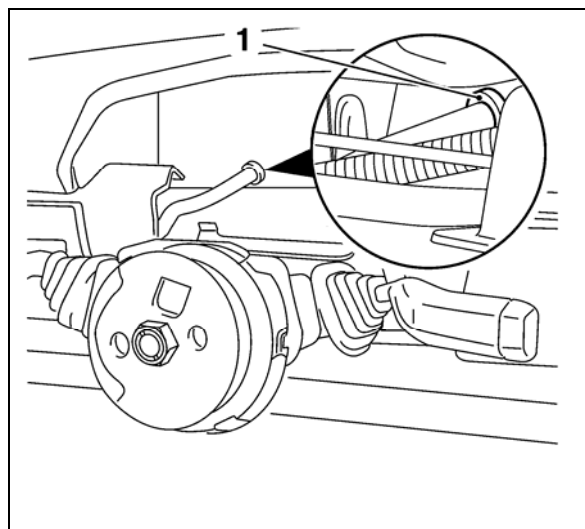
17. Route new vacuum hose into front compartment

- Second technician needed
 - Technician one guides the vacuum hose from passenger compartment
 - Second technician pulls the vacuum hose into front compartment

18. Check position of rubber sleeve (1) in hole of bulkhead

Note:

Vacuum hose can be damaged if the rubber sleeve is not in position correctly



19. Remove connector piece of brake booster from old vacuum hose and install it to new vacuum hose

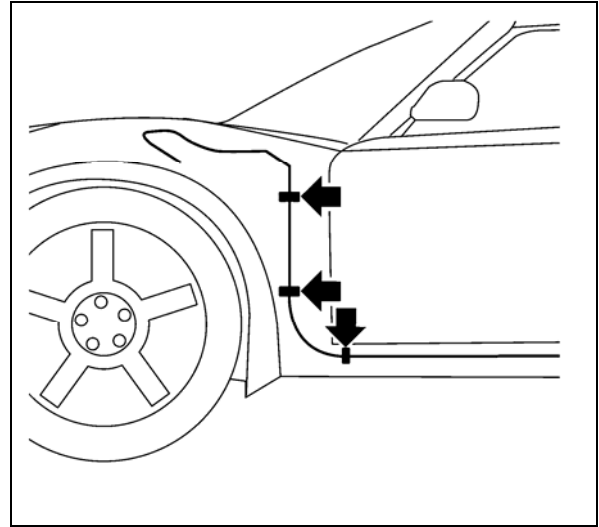
- Cut new vacuum hose directly behind bonding.

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EN

	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

20. Pull back Vacuum hose through aperture in passenger compartment until the original position in front aggregate room is reached
- Clip in 3x vacuum hose (see picture)



21. Attach brake fluid reservoir
- Position brake fluid reservoir
 - Attach cable strap
22. Close front compartment
23. Install door sill plate – left side
- Attach double faced adhesive tape
 - Attach 3x clip
24. Install instrument housing
- see working procedure „Instrument Housing, Remove and Install“, Group „N“, Service Instruction Speedster/VX220
 - Document-Number **00031174**
25. Raise vehicle
26. Route vacuum hose from left hand side sill into engine compartment and affix it
- Attach vacuum hose 2x to clip
 - Attach cable strap

	<h1>Customer Satisfaction Program</h1>	Ref. Number:	06-R-008
		TIS-Group:	H
		Release Date:	21 Aug 2006
		Revision:	01

27. Lower vehicle

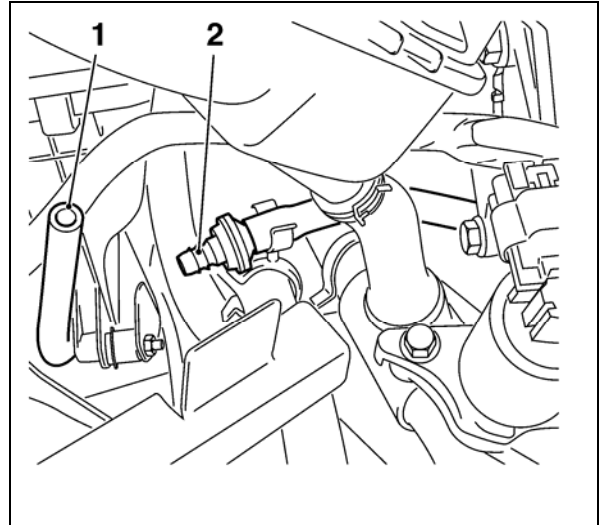
28. Attach vacuum hose (1) to non-return valve (2)

- Shorten vacuum hose if necessary

29. Attach coolant reservoir

- Attach wiring harness connector
- Install clip

30. Close engine compartment



31. Install undertray

- see working procedure „Undertray, Remove and Install“, Group „A“, Service-Instruction Speedster / VX 220
 - Document-Number **00031480**