

Repair of pneumatic lines in seat comfort systems (lumbar support, multicontour seat, dynamic seat, massage function)

Topic number	LI91.25-P-059380
Version	1
Design group	91.25 Multicontour seat (MCS)
Date	07-10-2014
Validity	All model series with pneumatic lumbar support, multicontour seat or dynamic seat (SA codes 275, 404, 405, 406, 409, 432, 433, 434)
Reason for change	Damage code added

Complaint:

Pneumatic comfort systems with insufficient performance, entirely inoperative or leaky.

Cause:

Pneumatic lines kinked, chafed through

Remedy:

1. Check pneumatic lines for leaks and kinks. (Pic 1)
2. Remove affected point using suitable tools. (Pic 2)
3. Repair affected line using connector and replacement plug coupling. (Pic 3)
4. Or: Repair affected point in the line using connectors and replacement line material. (Pic 4)

Notes:

- Do not install the connector in the immediate area of the kink.
- There must be no tensile stress acting on the pneumatic line.
- Make sure the pneumatic line has unobstructed movement.
- Pay attention to potential chafe points when routing the pneumatic line; glue a piece of felt over edges or chafe points if necessary.
- Push the line all the way onto the connector up to the stop. (Pic 5)
- The line material can be taken from existing stocks of replacement lines according to the length required. (Pic 6, Pic 7, Pic 8)

Attachments	
File	Description
Pic 1.JPG	Kink in pneumatic line
Pic 2.JPG	Remove affected point in pneumatic line
Pic 3.JPG	Repair affected point using connector and replacement plug coupling
Pic 4.JPG	Repair affected point using connectors and replacement line material
Pic 5.JPG	Push pneumatic line all the way onto connector
Pic 6.JPG	Overview of replacement plug couplings
Pic 7.jpg	Replacement line A 221 800 20 15
Pic 8.jpg	Replacement line A 000 800 20 15

Control unit/fault code		
Control unit	Fault code	Fault text
DSP-Pneumatic pump for dynamic seat (PFDS) (M (164), E (211), R (251), CLS (219), S (220), GL (164))	9251	Pressure loss was detected due to leakage.
DS-LF-Left front dynamic seat (FDSVL) (S (220))	9258	Leak air at cushion of left seat-Inflatable cushion in shoulder area ((BAUREIHE@220))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9259	Leakage at an air cushion-Air cushion for lateral support in right upper leg area (((ECU_FDSVL2_DEF_FDS und Massage@aktiv, (ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9256	Leakage at an air cushion-Air cushion in left upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9253	Leakage at an air cushion-Lumbar top (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9259	Leakage at an air cushion-Air cushion for lateral support in upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005), not(ECU_FDSVL2_DEF_FDS und Massage@aktiv)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9257	Leakage at an air cushion-Air cushion in right upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9254	Leakage at an air cushion-Lumbar middle (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9250	Leakage at an air cushion-Inflatable cushion in shoulder area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9258	Leakage at an air cushion-Air cushion for lateral support in left upper leg area (((ECU_FDSVL2_DEF_FDS und Massage@aktiv, (ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9251	Leakage at an air cushion-Inflatable cushion for lateral support (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005), not(ECU_FDSVL2_DEF_FDS und Massage@aktiv)))
PSE-Pneumatic system equipment (CL (215), SL (230), S (220))	B1438 (013)	Continuous cutoff of multicontour backrest: The safety time was exceeded 5 times.
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9252	Leakage at an air cushion-Right air cushion for lateral support (((ECU_FDSVL2_DEF_FDS und Massage@aktiv, (ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9251	Leakage at an air cushion-Left air cushion for lateral support (((ECU_FDSVL2_DEF_FDS und Massage@aktiv, (ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL2) (CL (216), S (221))	9255	Leakage at an air cushion-Lumbar bottom (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR) (M (164), E (211), R (251), CLS (219), S (220), GL (164))	9256	Leak air at cushion of right seat-Lumbar bottom
DS-RF-Right front dynamic seat (FDSVR) (M (164), E (211),	9251	Leak air at cushion of right seat-Right air cushion for lateral support

R (251),CLS (219),S (220),GL (164))		
DS-RF-Right front dynamic seat (FDSVR) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9254	Leak air at cushion of right seat-Lumbar top
DS-RF-Right front dynamic seat (FDSVR) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9250	Leak air at cushion of right seat-Left air cushion for lateral support
DS-RF-Right front dynamic seat (FDSVR) (S (220))	9258	Leak air at cushion of left seat-Inflatable cushion in shoulder area ((BAUREIHE@220))
DS-RF-Right front dynamic seat (FDSVR) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9258	Leak air at cushion of right seat-Seat cushion depth
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9251	Leakage at an air cushion-Inflatable cushion for lateral support (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005),not(ECU_FDSVR2_DEF_FDS und Massage@aktiv)))
DSP-Pneumatic pump for dynamic seat (PFDS) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9250	Pressure build-up not possible due to a leak.
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9255	Leakage at an air cushion-Lumbar bottom (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9252	Leakage at an air cushion-Right air cushion for lateral support ((ECU_FDSVR2_DEF_FDS und Massage@aktiv,(ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9259	Leakage at an air cushion-Air cushion for lateral support in right upper leg area ((ECU_FDSVR2_DEF_FDS und Massage@aktiv,(ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9251	Leakage at an air cushion-Left air cushion for lateral support ((ECU_FDSVR2_DEF_FDS und Massage@aktiv,(ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9250	Leakage at an air cushion-Inflatable cushion in shoulder area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9259	Leakage at an air cushion-Air cushion for lateral support in upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005),not(ECU_FDSVR2_DEF_FDS und Massage@aktiv)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9258	Leakage at an air cushion-Air cushion for lateral support in left upper leg area ((ECU_FDSVR2_DEF_FDS und Massage@aktiv,(ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9254	Leakage at an air cushion-Lumbar middle (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9253	Leakage at an air cushion-Lumbar top (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))

DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9256	Leakage at an air cushion-Air cushion in left upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
PSE-Pneumatic system equipment (CL (215),SL (230),S (220))	B1438 (012)	The safety time has been exceeded for the following pneumatic branch:Multicontour backrest
DS-RF-Right front dynamic seat (FDSVR2) (CL (216),S (221))	9257	Leakage at an air cushion-Air cushion in right upper leg area (((ECU1_DV_HEX@0002-ECU1_DV_HEX@0005)))
DS-LF-Left front dynamic seat (FDSVL) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9251	Leak air at cushion of left seat-Right air cushion for lateral support
DS-LF-Left front dynamic seat (FDSVL) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9256	Leak air at cushion of left seat-Lumbar bottom
DS-LF-Left front dynamic seat (FDSVL) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9258	Leak air at cushion of left seat-Seat cushion depth
DS-LF-Left front dynamic seat (FDSVL) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9250	Leak air at cushion of left seat-Left air cushion for lateral support
DS-LF-Left front dynamic seat (FDSVL) (M (164),E (211),R (251),CLS (219),S (220),GL (164))	9254	Leak air at cushion of left seat-Lumbar top

Parts								
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part	
A0069972389			Connector	1	For line diameter 6 mm		X	
A0069974189			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0069974089			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0069973989			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0069973889			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0069973789			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0069973689			Replacement plug coupling	1	With line (approx. 200 mm), line diameter 6 mm	X		
A0008002015			Replacement line	1	Line diameter 6 mm	X		
A2218002015			Replacement line	1	Line diameter 6 mm	X		

A 221 800 35 15			Multicontour seat line	1		X	
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Work units

Op. no.	Operation text	Time	Damage code	Note
				The valid damage codes depend on the processed model series