

Diverse messages in the instrument cluster, vehicle will not start, gears cannot be engaged

Topic number	LI54.21-N-069524
Version	6
Function group	54.21 Control units / basic modules
Date	09-30-2020
Validity	MODEL 907
Reason for change	Repair solution added to remedy
Reason for block	

Complaint:

Vehicle cannot be started, various messages in instrument cluster, gears cannot be engaged, ignition cannot be switched on, central locking has malfunction.

Attachments	
File	Description
Beispielbilder_example pictures.pdf	Example pictures

Cause:

Water entry or condensation on vehicle, resulting possibly in oxidation at plug and/or water/moisture entry in control unit N73/8 for Electronic Ignition Lock (EIS) and/or N127 Powertrain Control unit (CPC).

Check following areas for water entry / moisture:

- Hole in the left-hand A-pillar on inside, above control unit N73/8 for electronic ignition lock (EIS) (see attachment "Check instruction for missing adhesive on A-pillar above EIS" / "Eng. Check instruction")
- Leaky window bonding
- Beverage spilled in cup holder
- Roof area (seam seal, cracks, where applicable, front position lamps)
- Burnt out spot welds on body
- Condensation

Please Note: Liquid intrusion from outside influence(s) that are not attributable to manufacturer defect(s) are not warrantable.

Attachments	
File	Description
Eng. Check instuctuion 0650 2019 0016.pdf	Eng. Check instruction
Prüfanweisung Fehlender Kleber A-Säule über EZS.pdf	Check instruction for missing adhesive on A-pillar above EIS
Test instruction foam part.pdf	Check instruction for foam part

Remedy:

Check control unit N73/8 for Electronic Ignition Lock (EIS) and N127 Powertrain Control unit (CPC) for water entry/moisture traces.

If water entry / moisture traces are visible on control unit N73/8 for Electronic Ignition Lock (EIS) and/or N127 Powertrain Control unit (CPC), please localize the leaky area and rectify the leak.

- If traces of water are visible on control unit N73/8, replace the control unit
- If traces of corrosion are visible on the control unit's plug, repair it accordingly
- Make hole in pocket A6385460035 of 6 mm at position x (55 mm from longer side and 30 mm from shorter side on opening side of pocket) (see picture 1, caution, details on picture in mm! Picture 2: Pocket after hole has been made)
- Disassemble control unit N73/8 (EVS), remove plastic clips (2x, see picture 3) - Caution, make sure that the two clips are seated at the clip-in points on the control unit after disassembly in the correct position. (See picture 4).
- Slide hole in pocket over the tucker bolt and align pocket such that the opening faces downwards. (See picture 5).
- Spread pocket (see picture 6), slide control unit with upper clip-in point, over the tucker bolt (see picture 9) (Caution, make sure that both clips on the control unit are correctly seated, (wrong clip position in picture 7, correct position in picture 8)
- Slide hole on right side of pocket above the tucker bolt (blind assembly), secure against slipping down with finger (see picture 10) and fit nut onto tucker bolt. (Picture 11: Curve formation at edge of pocket)

If traces of water are also visible on the control unit N127 CPC and/or traces of corrosion are visible on the control unit's plug:

- If traces of water are visible on control unit N127, replace the control unit
- If traces of corrosion are visible on the control unit's plug, repair it accordingly
- Unclip scraper clip, see picture 12.
- Left-hand drive vehicle: Attach a scraper clip with item number A 2119970290 to left lower corner of control unit and fix lines in place using cable ties (see picture 13).
- Right-hand drive vehicle: Attach a scraper clip with item number A 2119970290 to right lower corner of control unit and fix lines in place using cable ties (see picture 14).

Attachments	
File	Description
1.JPG	Picture 1
2.JPG	Picture 2
3.JPG	Picture 3
4.JPG	Picture 4
5.JPG	Picture 5
6.JPG	Picture 6
7.JPG	Picture 7
8.JPG	Picture 8
9.JPG	Picture 9
10.JPG	Picture 10
11.JPG	Picture 11
12.JPG	Picture 12
13.JPG	Picture 13
14.jpg	Picture 14

Symptoms
Power generation / Engine management / Starter motor / Function / Defective
Overall vehicle / Safety and locking system / Drive authorization system DAS / Electronic ignition lock/steering lock / Malfunction
Overall vehicle / Safety and locking system / Drive authorization system DAS / Electronic ignition lock/steering lock / Does not receive turn authorization
Overall vehicle / Safety and locking system / Drive authorization system DAS / Electronic ignition lock/steering lock / Malfunction

XENTRY TIPS

Overall vehicle / Safety and locking system / Drive authorization system DAS / Function / Malfunction
Power transmission / Automatic transmission / Function / Engaging process
Overall vehicle / Safety and locking system / Locks/locking/Remote closing mechanism / Does not open
Overall vehicle / Safety and locking system / Locks/locking/Remote closing mechanism / Does not close
Overall vehicle / Safety and locking system / Locks/locking/Remote closing mechanism / Malfunction
Power transmission / Automatic transmission / Function / Shifting is not performed or is delayed
Overall vehicle / Wiring / Cable damaged/faulty
Overall vehicle / Networking / CAN/FlexRay communication / Malfunction
Overall vehicle / Networking / Gateway communication / Malfunction
Power generation / Engine management / Engine start/stop / Does not start
Overall vehicle / Networking / Diagnosis/software / Not diagnosable

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 638 546 00 35			Boot - Protective Cap	2		X
A 211 997 02 90			Loom Tie	4		X

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
80-6008	REMOVE/INSTALL ELECTRONIC IGNITION LOCK CONTROL UNIT	0.5	510AT 47	
30-1146	REMOVE/INSTALL DRIVETRAIN CONTROL UNIT (CPC)	0.5	5470M 47	

WIS-References

Document number	Title	Note	Allocation
AR54.21-D-0038TSR	Remove/install electronic ignition lock control unit	MODEL 907	Parts

Validity

Vehicle	Engine	Transmission
Sprinter 907	*	*

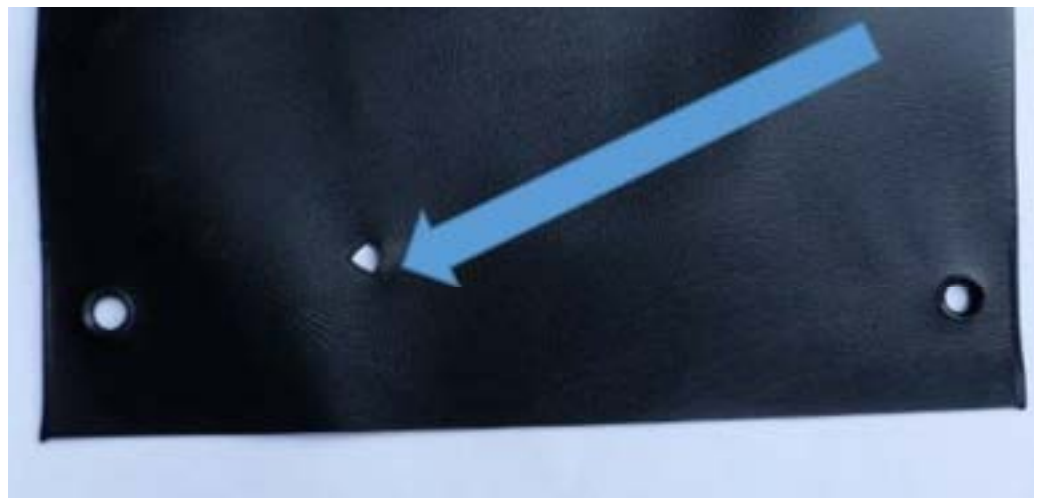
Attachments

XENTRY TIPS

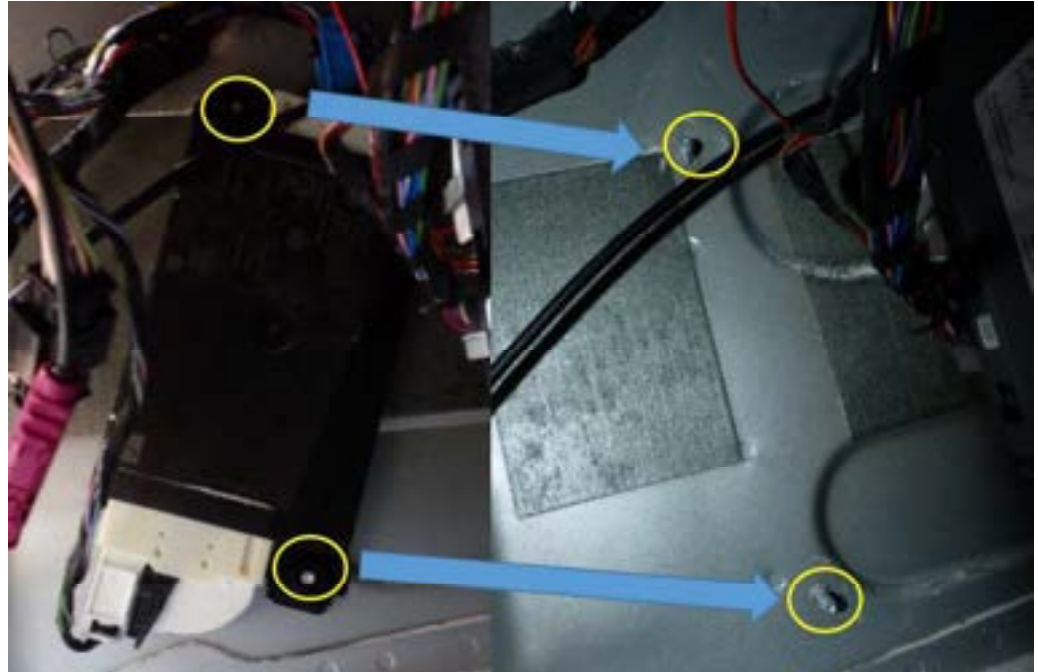
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2.JPG:



3.JPG:



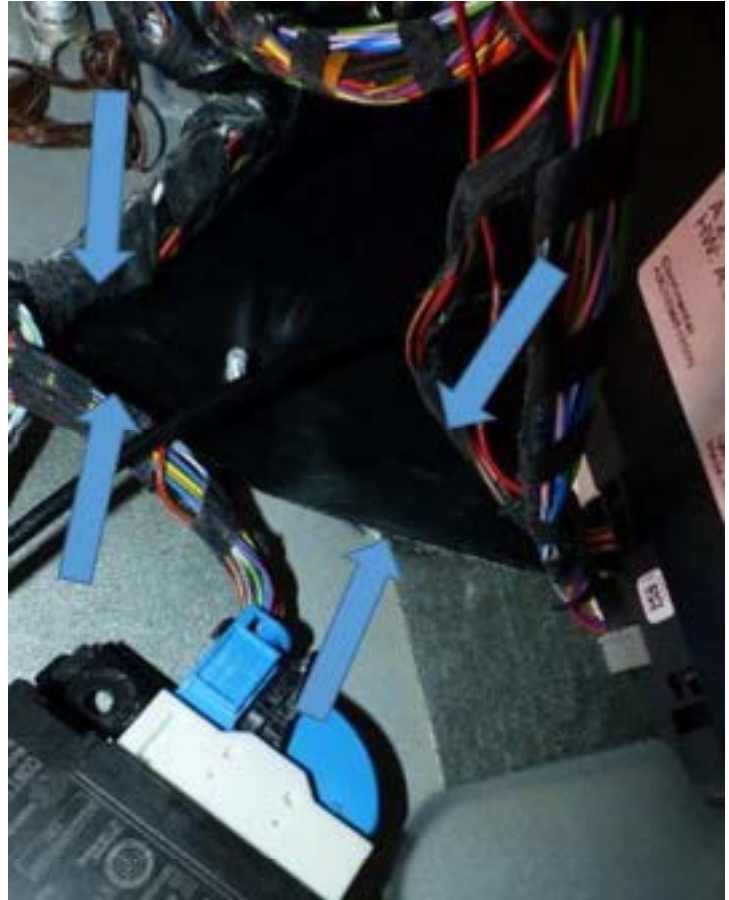
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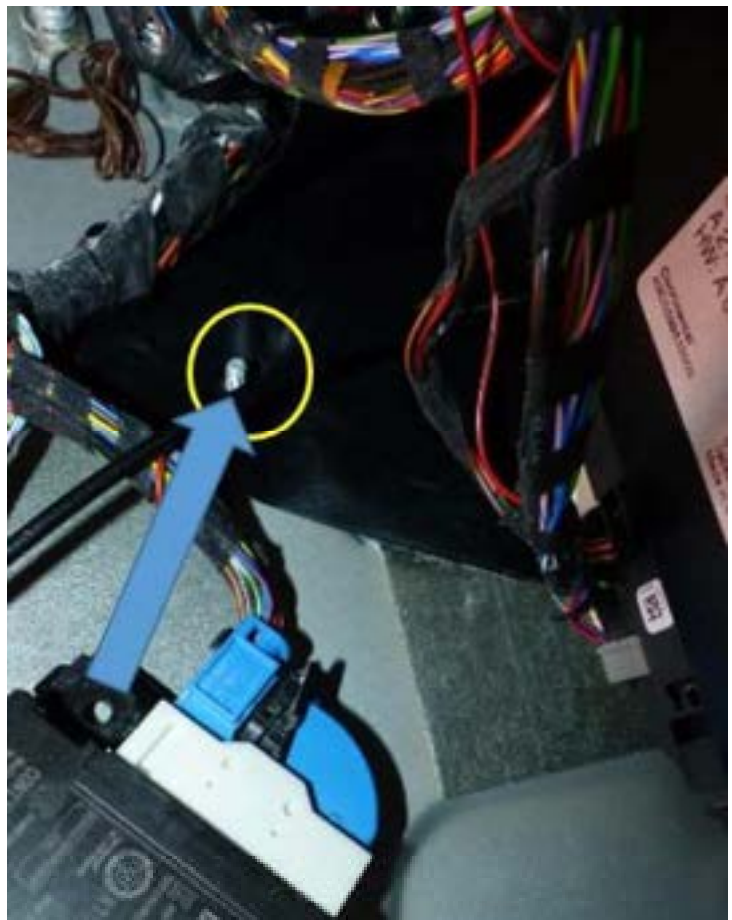


XENTRY TIPS

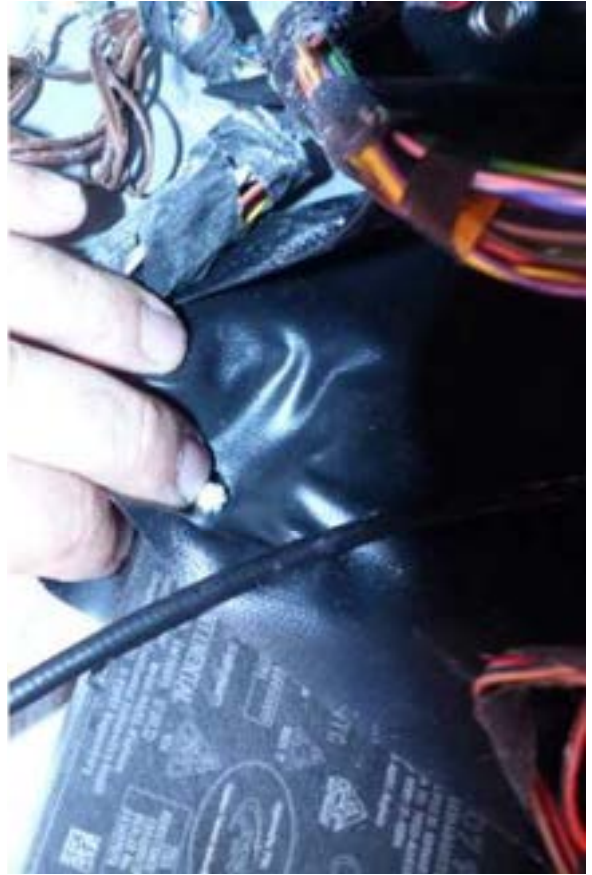
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13.JPG:



14.jpg:

