



ZFS DIRECTIVE FOR THE ASSESSMENT OF USED MECHATRONICS		Version 01-14		
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Subject:	Checklist for Used Parts
Component(s):	Mechatronic components
Task:	Inspection of returned cores
Date:	%(!%&\$\$%

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1 Description of Assessment Approach

General:

The objective is to sort out mechatronic units that cannot be remanufactured prior to the warehousing of components.

- 1.1. Assessment approach: Every single mechatronic unit is subject to a visual inspection.
- 1.2. The front and back side of the component must be inspected at the critical inspection points marked under Point 3.
- 1.3. The components are sorted out according to the criteria listed in the overview under Point 2 and/or on the basis of the photo catalogue under Point 4.
- 1.4. OK – Parts can be remanufactured.
not OK – Parts cannot be used and will not be remanufactured.

2 Assessment Catalogue - Overview

	Component	Assessment	Evaluation	
1	Mechatronics, complete/screws	Rust	not OK	
2	Connector	Damaged: torn out/broken	OK not OK	❶ ❷
3	Connector housing	Damaged: broken off/broken	not OK	
4	Speed sensor (various)	Damaged: broken off/broken	not OK	
5	Lock bracket	Damaged: broken off	not OK	
6	Connector pins	Damaged: bent, broken off	not OK	
7	Lock	Damaged: broken off/broken	not OK	
8	Solenoid valve/Pressure regulator	Damaged: broken off/broken Part missing	not OK	
9	"Panpipes" on four-wheel drive module	Damaged: broken off/broken	not OK	

❶ if **no other** damage is detected on the mechatronics

❷ if **additional** damage is detected at **one or several** points on the mechatronics

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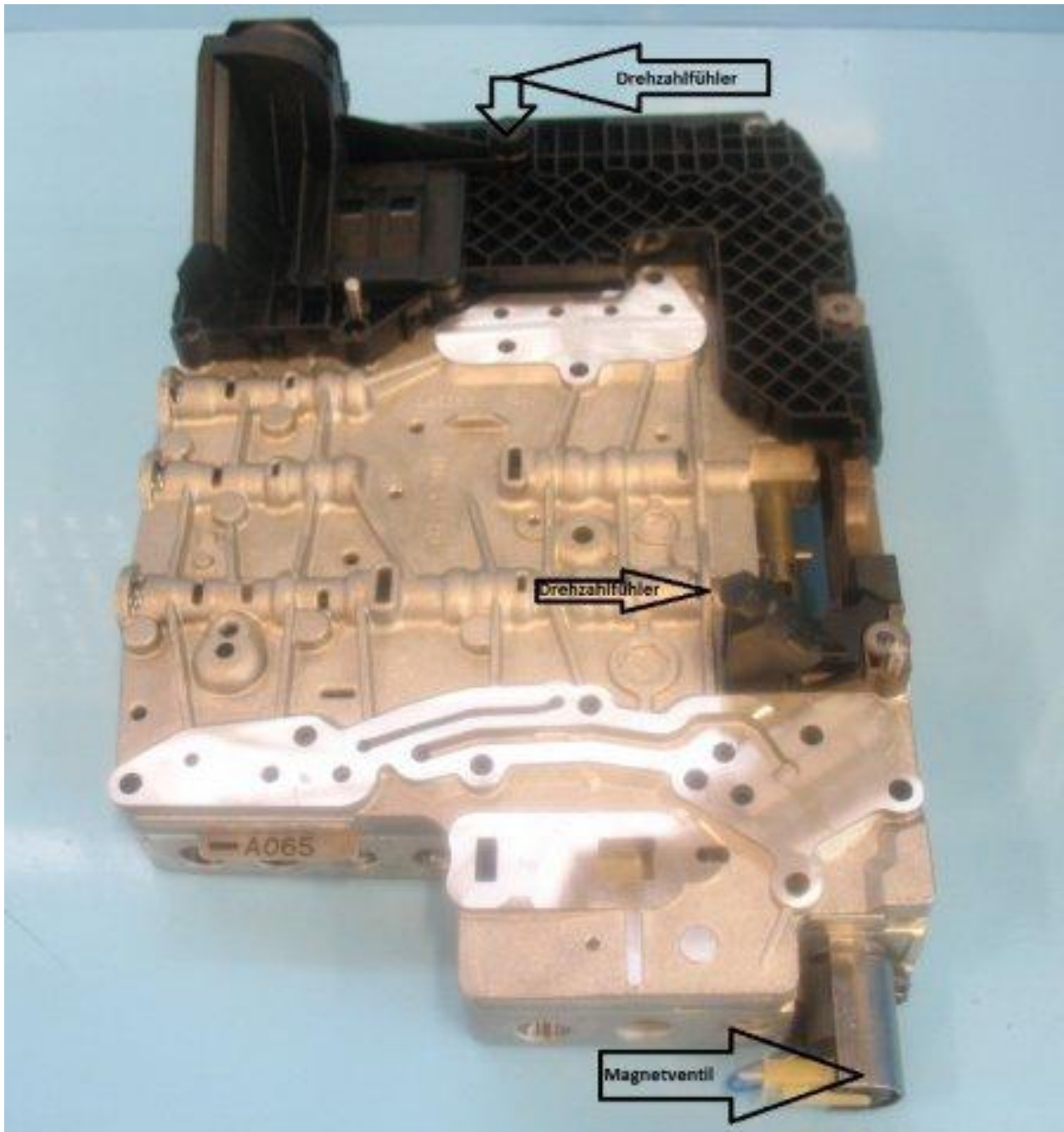
3 Inspection Points for Assessment:

Both parts of the mechatronic unit for assessment.

3.1



3.2



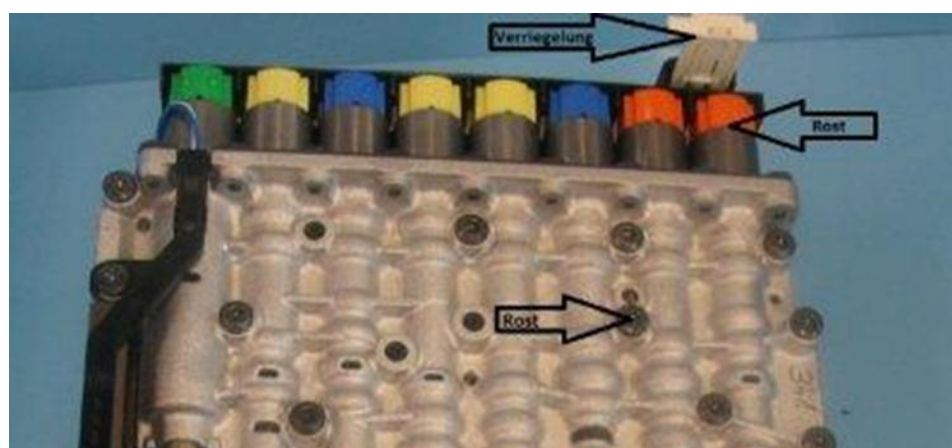
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4 Photo Catalogue for Assessment and Evaluation OK/Not OK

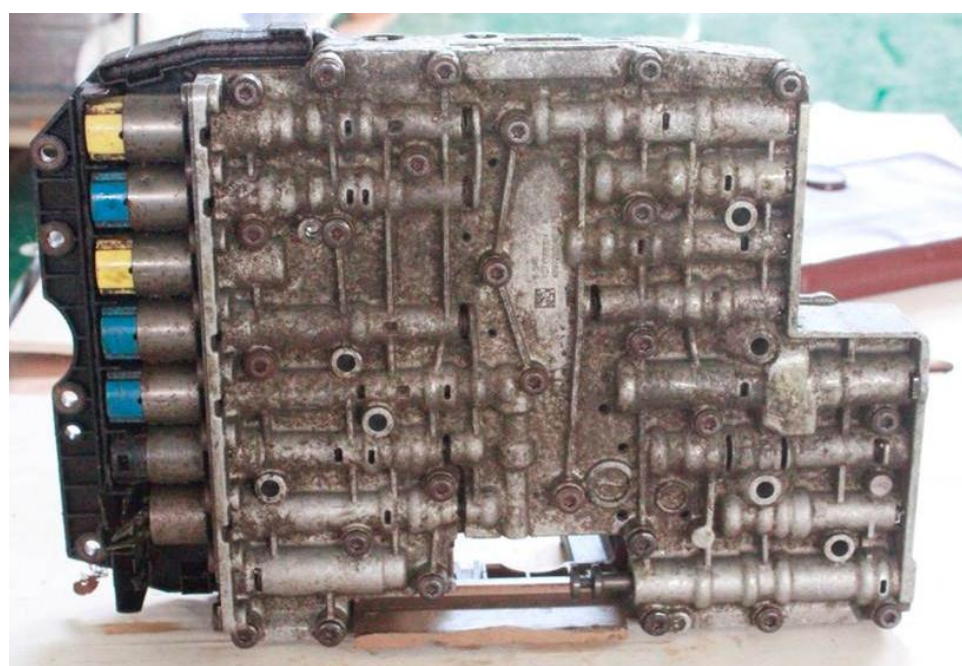
4.1 Rust

Inspection of complete component for possible rust points caused by previous contact with water. Particularly noticeable on screws.

Evaluation: Not OK if rust and/or previous water contact detected



Example: Extensive residue/rust



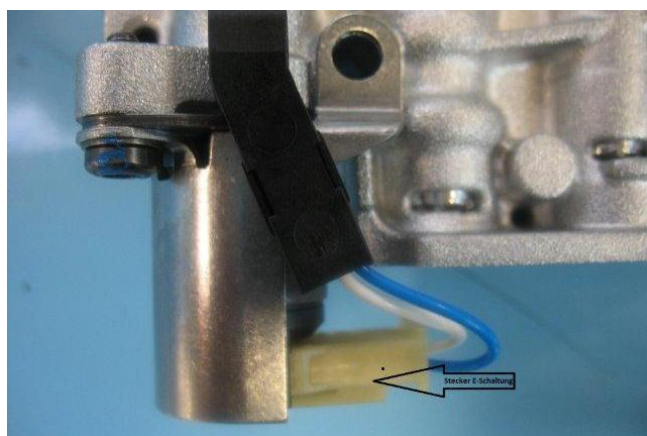
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4.2 Connector

Evaluation:

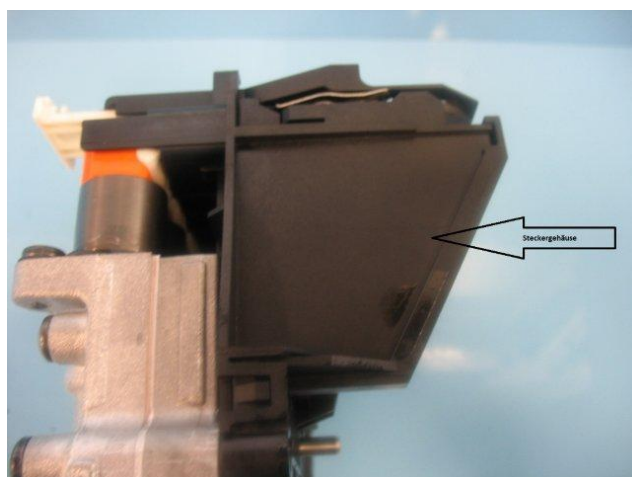
Case 1: OK if **ONLY** the connector is damaged (broken), as single damage on this mechatronic unit

Case 2: Not OK if the connector **AND** additional damage is detected on the mechatronic unit



4.3 Connector housing

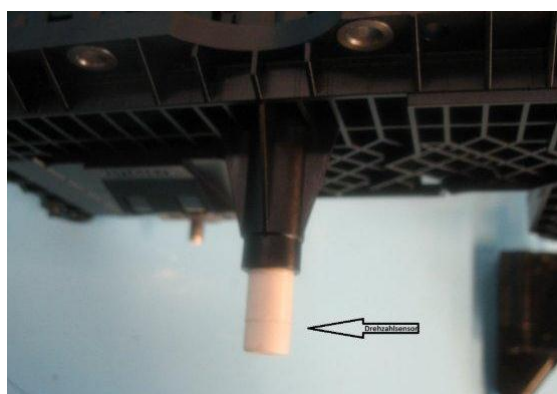
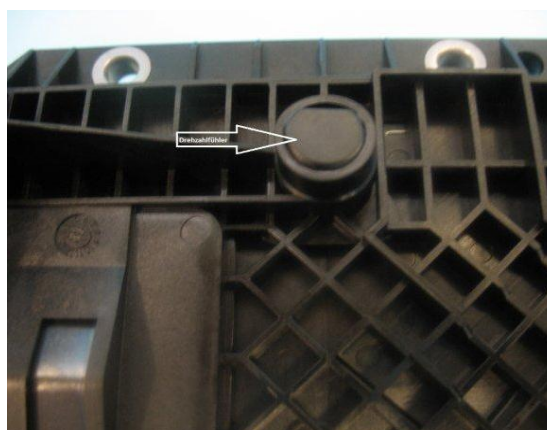
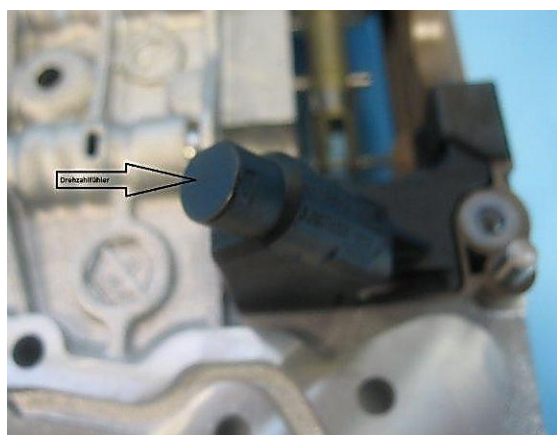
Evaluation: Not OK if damaged/broken, mechatronic cannot be used anymore



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4.4 Speed sensor - variants

Evaluation: Not OK if damaged/broken/broken off, no longer usable



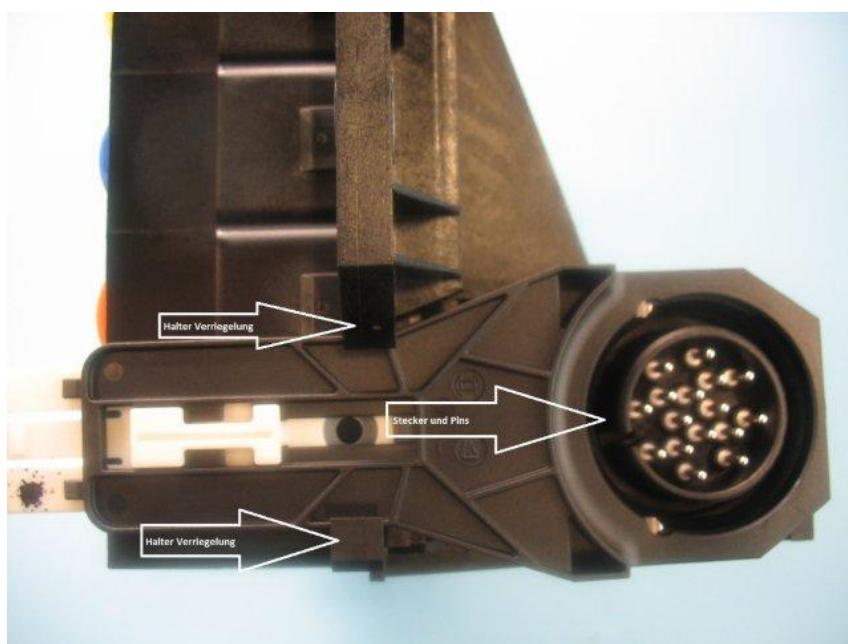
Example: Speed sensor and bracket broken off



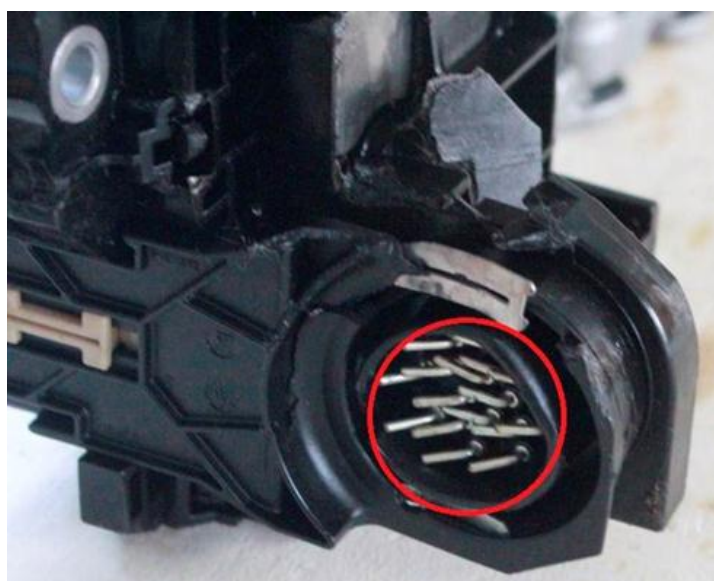
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4.5 – 4.6 Lock bracket/Connector pins

Evaluation: Not OK if a bracket has broken off, module cannot be used anymore and/or if pins are bent or broken off



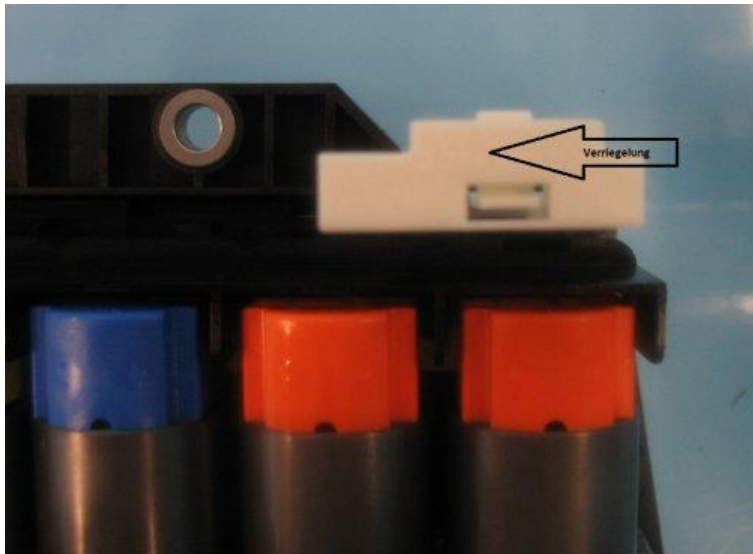
Example: Extreme case: All pins are bent.



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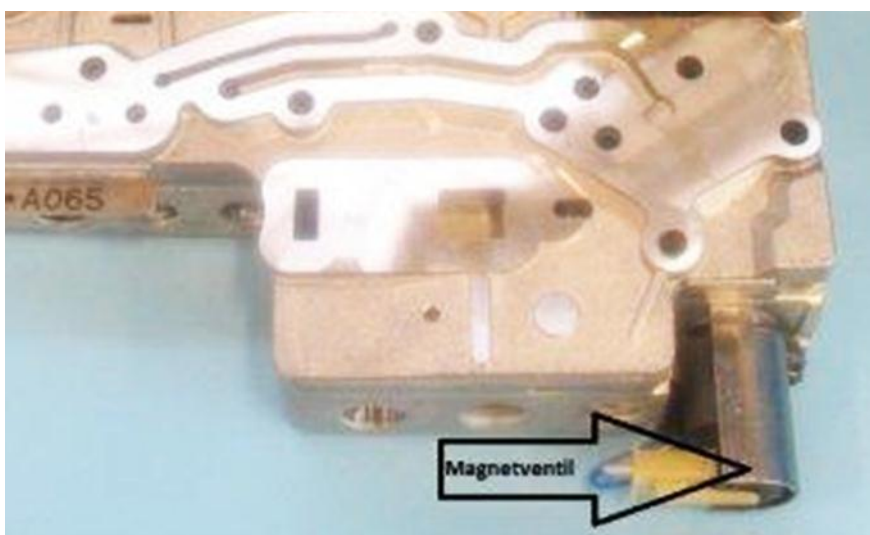
4.7 Lock

Evaluation: Not OK if damaged (broken/broken off)



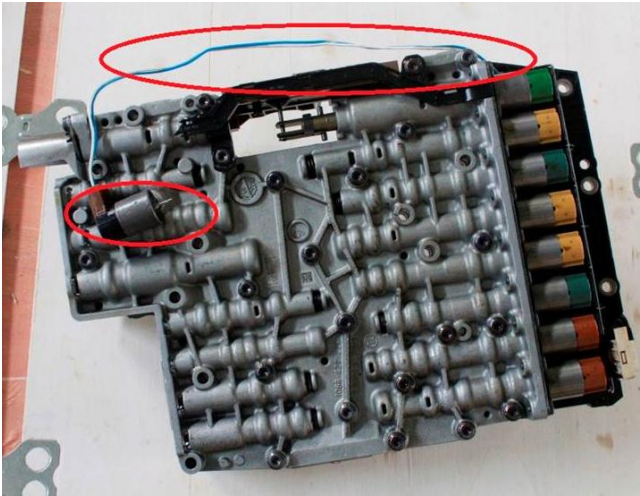
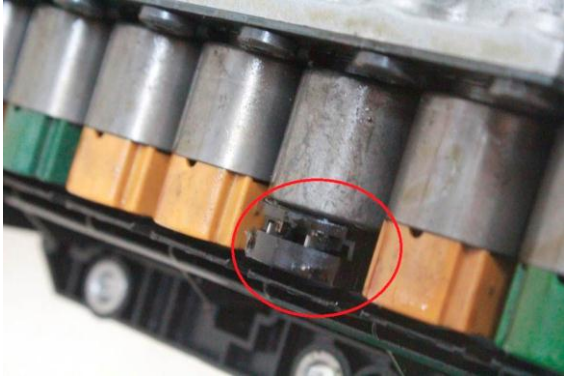
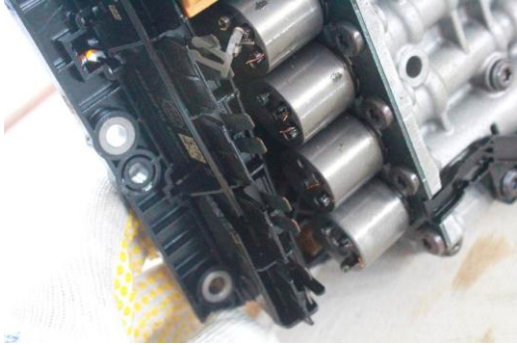
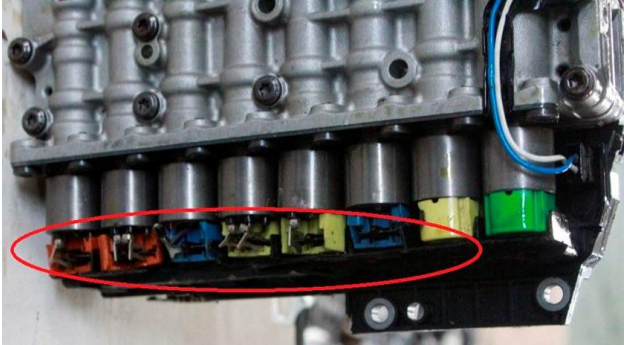
4.8 Solenoid valve/Pressure regulator

Evaluation: Not OK if damaged, i. e. broken off, broken, or completely missing



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Examples: pressure regulator defective, solenoid valve missing, solenoid valve broken off



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4.9 "Panpipes" on four-wheel drive module

Evaluation: Not OK if damaged (broken/broken off)

