



# Technical Service Information

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## **VOLKSWAGEN/AUDI SOLENOID CODE INTERPRETATION**

- COMPLAINT:** When a Volkswagen or Audi vehicle is equipped with a ZF Automatic Transmission, and using an aftermarket scan tool for code retrieval, indicates a solenoid fault, the scan tool will display the solenoid fault code using VAG nomenclature.
- CAUSE:** For example, if an Audi A6 equipped with a ZF4HP18FLE stores a 00264 code, the scan tool displays "Electrical fault -N91 or Solenoid 4". This is VAG code nomenclature. ZF refers to this solenoid as EDS-1, but the scan tool does not help to identify which solenoid in the ZF transmission is N-91 or Solenoid 4.
- CORRECTION:** Refer to the chart in Figure 1 for solenoid crossover identification between VAG and ZF nomenclature.

## SOLENOID CODE INTERPRETATION

| VAG TO ZF SOLENOID VALVE CONVERSION   |   |                  |              |              |                               |               |              |               |        |
|---|---|------------------|--------------|--------------|-------------------------------|---------------|--------------|---------------|--------|
| VEHICLE APPLICATION   | SCANNER DISPLAYS<br>TRANS-MISSION MODEL | ON/OFF SOLENOIDS |              |              | PRESSURE REGULATING SOLENOIDS |               |              |               |        |
|   |   | 1 or A           | 2 or B       | 3 or C       | 4 or D                        | 5 or E        | 6 or F       | 7 or G        | 8 or H |
| 1991-97 AUDI 100 QUATRO & A6  | 01F/01K<br>4HP18FL/FLA                  | N-88             | N-89         | N-90         | N-91                          | N-92          | N-93         | N-94          | N/A    |
| ALL OTHER 1995 & LATER VW/AUDI MODELS   | 01M/01N/01P                             | EV-1<br>N-88     | EV-2<br>N-89 | EV-3<br>N-90 | EV-4<br>N-91                  | *EV-5<br>N-92 | EV-6<br>N-93 | *EV-7<br>N-94 | N/A    |
| 1995 TO PRESENT AUDI A4 & A8<br>1997 TO PRESENT A6<br>1996 TO PRESENT VW PASSAT | 5HP19FL<br>01V                          | N-88             | N-89         | N-90         | N-215                         | N-216         | N-217        | N-218         | N-233  |
| 1996 TO PRESENT AUDI A8 AWD   | 5HP24A<br>01L                           | MV-1             | MV-2         | MV-3         | EDS-1                         | EDS-2         | EDS-3        | EDS-4         | EDS-5  |

*\* Solenoids EV-5 and EV-7 are briefly turned on during a shift, to reduce pressure, for proper shift feel. Even though they are ON/OFF solenoids, they "DO" regulate shift feel.*

Figure 1