DTC memory tables (for DTC's 002 through 065) for model163, follow. If there are **no** DTCs' stored, then continue with ☐ **13. Review** ☐ **13**regardless, for additional information.

Read out DTC's using HHT
The HHT will display only the defective electrical component and will refer to the respective test steps in section ☐ **23** of the Diagnostic Manual.

1. Review ☐ **11** entirely and this page before continuing diagnosis.

2. Check AFT level and correct as necessary

3. Check condition of AFT, see ☐ **11**/2

4. Connect HHT to data link connector (X11/4) as shown in connection diagram (see section 0).

5. Ignition: **ON**

6. Perform Quick Test with HHT and readout DTC'S.
Note:
The HHT, via its display indicates only the defective electrical components or refers to the corresponding Test step.

In order to further localize and determine the cause of an
intermittent DTC or find the root DTC, proceed as follows:
Subtract 96 from the displayed value (098 to 161) to determine the relevant DTC.

7. **Retrieve any additional information** on the displayed DTC by pressing the enter key.

1. If additional DTC's are stored in DTC memory of ETC or ME-SFI, further tests can be performed using the HHT (e.g. comparison of Nominal Values/Actual Values, or activation of components).

2. If no DTC'S are stored in DTC memory, the complaint may be of a hydraulic-mechanical nature (e.g. DTC 051 or 055), proceed with the Complaint Related Diagnostic Chart (see ☐ **13**/1).

3. (USA) **vehicles only:**
Illumination of the "CHECK ENGINE" MIL (A1e26) will reference corresponding DTC's in the DTC memory of the engine control module.

4. Transmission adaption (adaption of the ETC), see ☐ **11**

DTC	DTC intermittent	DTC (OBD) (USA) only	Note	Possible cause	Test step/Remedy 1)
002	098	P0753	Valid for diagnostic version 0 - 6, 13, 20	1-2/4-5 shift solenoid valve (Y3/6y3)	Wiring, plug connectors, 1-2/4-5 shift solenoid valve (Y3/6y3), ☐ **23** ⇒ **4.0**, see ☐ **13**/16
003	099	P0758	Valid for diagnostic version 0 - 6, 13, 20	2-3 shift solenoid valve (Y3/6y5)	Wiring, plug connectors 2-3 shift solenoid valve (Y3/6y5), ☐ **23** ⇒ **5.0**, see ☐ **13**/16
004	100	P0763	Valid for diagnostic version 0 - 6, 13, 20	3-4 shift solenoid valve (Y3/6y4)	Wiring, plug connectors. 3-4 shift solenoid valve (Y3/6y4), ☐ **23** ⇒ **6.0**, see ☐ **13**/16
005	101	P0743	Valid for diagnostic version 0 - 6, 13, 20	PWM solenoid valve (Y3/6y6) (torque converter lock-up)	Wiring, plug connectors. PWM solenoid (Y3/6y6), ☐ **23** ⇒ **7.0**, see ☐ **13**/16
006	102	P0748	Valid for diagnostic version 0 - 6, 13, 20	Modulating pressure regulating solenoid valve (Y3/6y1)	Wiring, plug connectors. Modulating pressure regulating solenoid valve (Y3/6y1), ☐ **23** ⇒ **8.0**, see ☐ **13**/16
007	103	P0748	Valid for diagnostic version 0 - 6, 13, 20	Shift pressure regulating solenoid valve (Y3/6y2)	Wiring, plug connectors. Shift pressure regulating solenoid valve (Y3/6y2), ☐ **23** ⇒ **9.0**, see ☐ **13**/16
008	104	--	Valid for diagnostic version 0 - 6	R/P-lock solenoid (Y66/1) 722.6 in Model 163 without touch shift.	Wiring, plug connectors. R/P-lock solenoid (Y66/1), ☐ **23** ⇒ **10.0**
009	105	--	Valid for diagnostic version 0 - 6	Starter lock-out relay module (K38/3) (fault is in the line).	Wiring, plug connectors, Model 140, 129: Starter lock-out relay module (K38/3), Model 210: Pulse module (N65), ☐ **23** ⇒ **11.0**
010	106	P0702	Valid for diagnostic version 0 - 6, 13, 20	Voltage supply to solenoid valves	Wiring, plug connectors. ☐ **23** ⇒ **3.0**
011	107	P0715	Valid for diagnostic version 0 - 6, 13, 20	Voltage supply to rpm sensors	Wiring, plug connectors. ☐ **23** ⇒ **12.0**
012	108	P0715	Valid for diagnostic version 0 - 6, 13, 20	RPM sensor 2 (Y3/6n2)	Wiring, plug connectors. RPM sensor 2 (Y3/6n2), see ☐ **13**/16
013	109	P0715	Valid for diagnostic version 0 - 6, 13, 20	RPM sensor 3 (Y3/6n3)	Wiring, plug connectors. RPM sensor 3 (Y3/6n3), see ☐ **13**/16
014	110	P0715	Valid for diagnostic version 6, 13, 20	RPM sensor comparison: RPM sensor 2 (Y3/6n2) to RPM sensor 3 (Y3/6n3), implausible	If RPM semsor 2 or 3 are faulty, switch electrical set. If impulse wheel is loose for RPM sensor 2 or 3, repair transmission or replace transmission.
015	111	P0700	Valid for diagnostic version 6, 13, 20	Excessive RPM: RPM sensor 2 (Y3/6n2) or RPM sensor 3 (Y3/6n3)	See ☐ **13**/16
			Valid for diagnostic version	Transmission selector lever coding	Wiring, plug connectors.

017	113	P0705	4, 5, 6	invalid	Transmission range recognition switch (S16/10)
018	114	P0705	Valid for diagnostic version 0, 1, 2, 3	Transmission selector lever implausible	See ☐ **13** Wiring, plug connectors.
018	114	--	Valid for diagnostic version 4, 5, 6	Transmission selector lever between ranges	See ☐ **13**/17 Wiring, plug connectors.
019	115	--	Valid for diagnostic version 0, 1, 2	Temperature sensor (Y3/6b1) defective	Wiring, plug connectors. Temperature sensor (Y3/6b1)
020	116	--	Valid for diagnostic version 0, 1, 2	Starter lock-out contact (Y3/6s1) not functioning	Starter lock-out contact (Y3/6s1), ☐ **23** ⇒ **13.0**, see ☐ **13**/17
020	116	--	Valid for diagnostic version 3, 4, 5, 6, 13, 20	Temperature sensor (Y3/6b1) faulty, Starter lock-out contact (Y3/6s1) no function	Starter lock-out contact (Y3/6s1), ☐ **23** ⇒ **13.0**, see ☐ **13**/17
021	117	--	Valid for diagnostic version 0 - 6, 13, 20	Circuit 87 voltage supply fault (low or overvoltage)	Wiring, plug connectors. ☐ **23** ⇒ **1.0**
022	118	P0720	Valid for diagnostic version 0 - 6, 13, 20	CAN: Right rear wheel speed (VSS) from traction system implausible	
023	119	P0720	Valid for diagnostic version 0 - 6, 13, 20	CAN: Left rear wheel speed (VSS) from traction system implausible	
024	120	--	Valid for diagnostic version 0, 1	CAN: Pedal value from engine management implausible	
024	120	--	Valid for diagnostic version 2 - 6, 13, 20	CAN: Right front wheel speed (VSS) from traction system implausible	
025	121	--	Valid for diagnostic version 0, 1	CAN: Engine rpm from engine management implausible	
025	121	--	Valid for diagnostic version 2 - 6, 13, 20	CAN: Left front wheel speed (VSS) from tracton system implausible	
026	122	--	Valid for diagnostic version 0, 1	CAN: Right engine torque from engine management implauslible	
026	122	--	Valid for diagnostic version 2, 3, 4, 5, 6, 13, 20	CAN: Pedal value from engine management implausible	See ☐ **13**/17
027	123	--	Valid for diagnostic version 0, 1	Altitude adjustment factor from engine management implausible **(This code can be ignored only if no code was set in ME-SFI)**	
027	123	--	Valid for diagnostic version 2, 3, 4, 5, 6, 13	CAN: Adjusted engine torque implausible	
027	123	--	Valid for diagnostic version 20	CAN: Static engine torque implausible	
028	124	--	Valid for diagnostic version 0, 1	CAN: Left engine torque from engine management implausible	See ☐ **13**/17
028	124	--	Valid for diagnostic version 2, 3, 4, 5, 6, 13, 20	CAN: Engine rpm from engine management implausible	See ☐ **13**/17
029	125	--	Valid for diagnostic version 2, 3, 4, 5, 6, 13	CAN: Right engine torque from engine management implausible	See ☐ **13**/17
029	125	--	Valid for diagnostic version 20	CAN: Minimal engine torque from engine management implausible	See ☐ **13**/17
030	126	--	Valid for diagnostic version 0, 1	CAN: Communication to traction system faulty	
030	126	--	Valid for diagnostic version 2 - 6, 13, 20	CAN: Altitude correction factor from engine management implausible **(This code can be ignored only if no code was set in ME-SFI)**	--
031	127	--	Valid for diagnostic version 0,1	CAN: Engine management communication faulty	
031	127	--	Valid for diagnostic version 3, 13, 20	CAN: Maximum induced engine torque from engine management implausible	
031	127	--	Valid for diagnostic version 4, 5, 6, **except engines 119 and 120**	CAN: Maximum induced engine torque from engine management implausible	
032	128	--	Valid for diagnostic version 0, 1	CAN: Engine management communication faulty	
032	128	--	Valid for diagnostic version 20	CAN: Engine torque requirement for traction system from engine management implausible	
033	129	--	Valid for diagnostic version 0,1	CAN: Engine management communication faulty	
033	129	--	Valid for diagnostic version 3, 4, 5, 6, 13	CAN: Throttle valve actuator actual value from engine management implausible	
034	130	P0750	Valid for diagnostic version 0, 1, **For engine 120 only**	CAN: Engine management communication faulty	
034	130	P0720	Valid for diagnostic version 13, 20	CAN: Communication with Electronic selector lever module control module (N15/5) faulty Transmission selector lever version coding implausible	See Star Diagnosis, Read out DTC memory for Electronic Selector Lever Module Control Module (N15/5).
035	131	--	Valid for diagnostic version 0 - 6, **For engine 120 only**	CAN: Engine management communication faulty	
036	132	--	Valid for diagnostic version 0 - 6, 13, 20	CAN: Communication from engine management faulty or engine temperature implausible	

037	133	--	Valid for diagnostic version 0 - 5	CAN: All communication faulty	See ☐ **13**/17
037	133	--	Valid for diagnostic version 6, 13, 20	CAN: Line faulty (bus-off)	Check lines from data buse.
038	134	P0720	Valid for diagnostic version 2, 3, 4, 5, 6, 13, 20	CAN: Traction system communication faulty	See ☐ **13**/17
039	135	--	Valid for diagnostic version 2, 3, 4, 5, 6, 13, 20	CAN: Engine management communication faulty	
040	136	--	Valid for diagnostic version 3	CAN: Instrument cluster communication faulty	
040	136	--	Valid for diagnostic version 4, 5, 6, **except engines 119 and 120**	CAN: Instrument cluster communication faulty	
040	136	--	Valid for diagnostic version 13, 20	CAN: Instrument cluster communication faulty, CAN: Electronic ignition switch (EIS) communication faulty	See STAR diagnosis, Readout DTCs' for EIS and instrument cluster (A1)
041	137	P0700	Valid for diagnostic version 3, 4, 5, 6 **Except For engine 119/120**	CAN: Communication with transfer case control module faulty	--
041	137	P0700	Valid for diagnostic version 13, 20	CAN: Communication with transfer case control module faulty	--
049	145	P0700	Valid for diagnostic version 6, 13, 20	Excessive engine RPM	--
050	146	P0700	Valid for diagnostic version 3, 4, 5	Execessive RPM: RPM sensor 3 (Y3/6n3) or Externally toothed plate gear	See ☐ **13**/17
051	146	P0700	Valid for diagnostic version 6, 13, 20	Non-acceptable transmission gear ratio	See ☐ **13**/18
051	147	P0700	Valid for diagnostic version 0 - 6, 13, 20	Gear implausible or transmission slips	See ☐ **13**/18
052	148	P0700	Valid for diagnostic version 0, 1, 2	Command valve (6, 14 or 25) sticking under pressure	See ☐ **13**/24
052	148	P0700	Valid for diagnostic version 3, 4, 5, 6, 13, 20	Torque converter lock-up clutch: unauthorized lock	See ☐ **13**/18
053	149	P0740	Valid for diagnostic version 0, 1, 2	Torque converter lock-up clutch: not functioning	See ☐ **13**/18
053	149	P0740	Valid for diagnostic version 3, 4, 5, 6, 13, 20	Torque converter lock-up clutch: input too high	See ☐ **13**/18
054	150	--	Valid for diagnostic version 0 - 6, 13, 20	No transmission overload protection (return signal)	--
055	151	P0730	Valid for diagnostic version 0 - 6, 13, 20	Gear comparison or selected gear not attained	See ☐ **13**/19
056 - 059	152 - 155	P0702	Valid for diagnostic version 0 - 6, 13, 20	Fault in transmission control module (N15/3)	Wiring, plug connections. N15/3
060 - 061	156 - 157	--	Valid for diagnostic version 0 - 6, 13, 20	Fault in transmission control module (N15/3)	Wiring, plug connections. N15/3
062 - 064	158 - 160	P0702	Valid for diagnostic version 0 - 6, 13, 20	Fault in transmission control module (N15/3)	Wiring, plug connections. N15/3
065	161	--	Valid for diagnostic version 0 - 6, 13, 20	Fault in transmission control module (N15/3)	Wiring, plug connections. N15/3, see ☐ **13**/19

1) Observe Preparation for Test, see ☐ **22**.