

Code	Description	Limitation	Action	Connection and component	Diagnostic menu
00/50	Memory error in control unit transmission.	Transmission locked in neutral (Shutdown).	–	–	–
00/51	Memory error in control unit transmission.	Transmission locked in neutral (Shutdown).	–	–	–
00/52	Memory error in control unit transmission.	Transmission locked in neutral (Shutdown).	–	–	–
00/53	Memory error in control unit transmission.	Transmission locked in neutral (Shutdown).	–	–	–
20/60	Sensor oil pressure (B253) indicates low oil pressure when there should be pressure.	Transmission locked in neutral (Shutdown).	Check cable harness between the control unit and the component. Check the solenoid valve.	D793/A:2 – B253	TRANSM , menu 10
20/61	Sensor oil pressure (B253)	Transmission locked in	Check cable	D793/A:2	TRANSM

	indicates low oil pressure when there should be pressure.	neutral (Shutdown).	harness between the control unit and the component.	– B253	, menu 10
	Solenoid valves VFS short-circuiting to voltage, ground, or open circuit.	Transmission locked in neutral (Shutdown).	Check cable harness between the control unit and the component with diagnostic menu.	D793/D1 – Y6069, D793/F2 – Y6075	TRANSM , menu 7
			Check the solenoid valve.		
Code	Description	Limitation	Action	Connection and component	Diagnostic menu
30/04	Low battery voltage.	Control unit saves stored information to flash memory and restarts to clear memory.	Check cabling to control unit. Check alternator, battery and cabling between battery	–	CAN/ POWER, menu 15

			and alternator.		
30/05	High battery voltage.	Control unit receives reduced proportional control precision depending on reduced PWM work cycle.	Check voltage feed. If auxiliary start equipment is connected, dis- connect it.	–	CAN/ POW- ER, menu 15
31/00	Reference voltage sensor 8 V, too low.	Control unit receives reduced sensor signals.	Check voltage feed. Check the control unit.	–	CAN/ POW- ER, menu 15
31/01	Reference voltage sensor 8 V, too high.	Control unit receives reduced sensor signals.	Check voltage feed. Check the control unit.	–	CAN/ POW- ER, menu 15
40/06	Incorrect direction from gear selector.	Control unit locks trans- mission in neutral.	Check cabling to gear se- lector with regards to for- ward and reverse signal.	–	TRANSM , menu 2
41/06	Incorrect gear selection from gear selector.	Control unit doesn't allow change of range, however,	Check cabling to gear se- lector with regards to signal range.	–	TRANSM , menu 2

		operation of machine is possible.			
42/04	Actual gear ratio too low.	Control unit indicates that one or several clutches are slipping.	Check transmission with purpose to understand if and, if that is the case, which clutch is slipping. Check the set gear ratio for the control unit.	–	TRANSM , menu 6
42/05	Actual gear ratio too high.	Control unit indicates that one or several clutches are slipping.	Check transmission with purpose to understand if and, if that is the case, which clutch is slipping. Check the set gear ratio for the control unit.	–	TRANSM , menu 6
43/03	Signal from Sensor engine rpm and oil temperature transmission (B758/766)	Control unit indicates the error.	Check cable harness between the control unit and the component.	D793/H3 – B758/766	TRANSM , menu 10

	outside valid interval.		Check the sensor.		
Code	Description	Limitation	Action	Connection and component	Diagnostic menu
43/07	Torque converter's temperature exceeds 100 ° C.	Control unit indicates the error to make operator aware of the warning's lev- el.	Check transmission oil cooler, clean as needed. Check the thermostat in the transmission oil cooler.	D793/H3 – B758/766	TRANSM , menu 10
		The control unit protects the transmission and does not allow the temperature in the torque converter to exceed the limit value. The control unit locks the transmission in neutral position, the engine is restricted to 50% of max. rpm.	Check transmission oil cooler, clean as needed. Check the thermostat in the transmission oil cooler.	D793/H3 – B758/766	TRANSM , menu 10
44/10	Incorrect signal for throttle pedal	–	Use diagnostic menu to find	–	CAN/ POW- ER,

	position from Control unit engine (D794)		incorrect segment.		menu 3
45/05	Max. torque for inching has been exceeded.	–	–	–	–
50/00	Sensor oil pressure (B253), short- circuited to ground.	Transmission in Limp- Home.	Check cable harness be- tween the control unit and the component. Check the sensor.	D793/A:2 – B253	TRANSM , menu 10
50/01	Sensor oil pressure (B253), not connected or open circuit.	Transmission in Limp- Home.	Check cable harness be- tween the control unit and the component. Check the sensor.	D793/A:2 – B253	TRANSM , menu 10
51/00	Sensor engine rpm and oil temperature transmission (B758/766) short- circuited to ground.	The control unit limits the transmission's temperature measurement to the lowest value in its settings, which results in poor temperature compensation.	Check cable harness be- tween the control unit and the component. Check the sensor.	D793/H3 – B758/766	TRANSM , menu 10

Code	Description	Limitation	Action	Connection and component	Diagnostic menu
51/01	Sensor engine rpm and oil temperature transmission (B758/766) not connected or open circuit.	The control unit limits the transmission's temperature measurement to the highest value in its settings, which results in poor temperature compensation.	Check cable harness between the control unit and the component. Check the sensor.	D793/H3 – B758/766	TRANSM , menu 10
52/00	Sensor oil temperature (S221) short-circuited to ground.	The control unit limits the transmission's temperature measurement to the highest value in its settings, which results in poor temperature compensation.	Check cable harness between the control unit and the component. Check the sensor.	D793/J3 – S221	TRANSM , menu 10
52/01	Sensor oil temperature (S221) open circuit.	The control unit limits the transmission's temperature measurement to the highest value in its	Check cable harness between the control unit and the component. Check the sensor.	D793/J3 – S221	TRANSM , menu 10

			set- tings, which results in poor temperature compensation.		
54/00	Reference voltage sensor 5 V short- circuiting to frame ground.	–		Check cable harness be- tween the control unit and the component. Check the sensor.	– CAN/ POW- ER, menu 15
54/01	Reference voltage sensor 5 V open circuit.	–		Check cable harness be- tween the control unit and the component. Check the sensor.	– CAN/ POW- ER, menu 15
60/00	Sensor rpm drum (B752) short-circuited to ground.		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm. If several rpm signals or if the engine rpm signal are	Check cable between control unit and component. Check component.	D793/C3 – B752 TRANSM , menu 6

defective,
the control
unit
activates
Limp-
home.

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		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm.			
60/01	Sensor rpm drum (B752) not connected.	If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.	Check cable between control unit and component. Check component.	D793/C3 – B752	TRANSM , menu 6
61/00	Sensor rpm output shaft (B758) short-	When only one rpm signal that is not the engine	Check cable between control unit and component.	D793/D3 – B758	TRANSM , menu 6

	<p>rpm signal is incorrect, the control unit calculates the missing rpm.</p> <p>If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.</p>	<p>Check component.</p>	
<p>61/01</p> <p>Sensor rpm output shaft (B758) not connected.</p>	<p>When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm.</p> <p>If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.</p>	<p>Check cable between control unit and component.</p> <p>Check component.</p>	<p>D793/D3 – B758</p> <p>TRANSM , menu 6</p>

		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm.			
		If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.	Check cable between control unit and component.		
62/00	Sensor engine rpm (B758/766), short-circuited to ground.		Check component.	D793/F3 – B758/766	TRANSM , menu 6

Code	Description	Limitation	Action	Connection and component	Diagnostic menu
		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm.	Check cable between control unit and component.		
62/01	Sensor engine rpm (B758/766), not connected or has open circuit.	If several rpm signals or	Check component.	D793/F3 – B758/766	TRANSM , menu 6

		if the engine rpm signal are defective, the control unit activates Limp-home.			
		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit calculates the missing rpm.			
		If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.	Check cable between control unit and component.		
63/00	Sensor rpm turbine (B751) short-circuited to ground.		Check component.	D793/R2 – B751	TRANSM , menu 6
		When only one rpm signal that is not the engine rpm signal is incorrect, the control unit	Check cable between control unit and component.		
63/01	Sensor rpm turbine (B751) not connected.		Check component.	D793/R2 – B751	TRANSM , menu 6

		calculates the missing rpm. If several rpm signals or if the engine rpm signal are defective, the control unit activates Limp-home.			
70/00	Solenoid valve VFS front (Y630), short-circuited to each other, signal cable short-circuited to voltage, or plus-cable short-circuited to frame ground.	Transmission in Limp-Home.	Check cable harness between the control unit and the component. Check the solenoid valve.	D793/B1 – Y630, C1 – Y630	TRANSM, menu 8
70/01	Solenoid valve VFS forward (Y630) open circuit or short-circuited voltage.	Transmission in Limp-Home.	Check cable harness between the control unit and the component. Check the solenoid valve.	D793/B1 – Y630, C1 – Y630	TRANSM, menu 8
Code	Description	Limitation	Action	Connection and component	Diagnostic menu

			Check cable harness be- tween the control unit and the component.		
70/02	Solenoid valve VFS for- ward (Y630), control cur- rent higher than 1400 mA.	Transmission in Limp- Home.	Check the solenoid valve.	D793/B1 – Y630, C1 – Y630	TRANSM , menu 9
70/03	Solenoid valve VFS for- ward (Y630), control cur- rent outside approved interval. Incorrect impedance.	Transmission in Limp- Home.	Check the solenoid valve.	D793/B1 – Y630, C1 – Y630	TRANSM , menu 9
71/00	Solenoid valve VFS 2/4 (Y6069), short- circuited to each other, signal cable short- circuited to voltage, or plus- cable short- circuited to frame ground.	Transmission in Limp- Home.	Check the solenoid valve.	D793/D1 – Y6069, E1 – Y6069	TRANSM , menu 8

			Check cable harness be- tween the control unit and the component.		
71/01	Solenoid valve VFS 2/4 (Y6069) open circuit or short- circuited voltage.	Transmission in Limp- Home.	Check the solenoid valve.	D793/D1 – Y6069, E1 – Y6069	TRANSM , menu 8
			Check cable harness be- tween the control unit and the component.		
71/02	Solenoid valve VFS 2/4 (Y6069), control current higher than 1400 mA.	Transmission in Limp- Home.	Check the solenoid valve.	D793/D1 – Y6069, E1 – Y6069	TRANSM , menu 9
			Check cable harness be- tween the control unit and the component.		
71/03	Solenoid valve VFS 2/4 (Y6069), control current outside approved interval (incorrect impedance).	Transmission in Limp- Home.	Check the solenoid valve.	D793/D1 – Y6069, E1 – Y6069	TRANSM , menu 9

72/00	Solenoid valve VFS re-verse (Y631), cables short-circuited to each other, signal cable short- circuited to voltage, or plus-cable short- circuited to frame ground.	Transmission in Limp- Home.	Check cable harness be- tween the control unit and the component. Check the solenoid valve.	D793/F1 – Y631, G1 – Y631	TRANSM , menu 8
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Code	Description	Limitation	Action	Connection and component	Diagnostic menu
72/01	Solenoid valve VFS re-verse (Y631) open circuit or short- circuited volt- age.	Transmission in Limp- Home.	Check cable harness be- tween the control unit and the component. Check the solenoid valve.	D793/F1 – Y631, G1 – Y631	TRANSM , menu 8

72/02	Solenoid valve VFS re-verse (Y631), control current higher than 1400 mA.	Transmission in Limp- Home.	Check cable harness be- tween the control unit and the component. Check the	D793/F1 – Y631, G1 – Y631	TRANSM , menu 9
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			solenoid valve.		
			Check cable harness between the control unit and the component.		
72/03	Solenoid valve VFS reverse (Y631), control current outside approved interval (incorrect impedance).	Transmission in Limp-Home.	Check the solenoid valve.	D793/F1 – Y631, G1 – Y631	TRANSM , menu 9
			Check cable harness between the control unit and the component.		
73/00	Solenoid valve VFS 1/3 (Y6067), cables short-circuited to each other, signal cable short-circuited to voltage, or plus-cable short-circuited to frame ground.	Transmission in Limp-Home.	Check the solenoid valve.	D793/H1 – Y6067, J1 – Y6067	TRANSM , menu 8
			Check cable harness between the control unit and the component.		
73/01	Solenoid valve VFS 1/3 (Y6067) open circuit or short-circuited voltage.	Transmission in Limp-Home.	Check the	D793/H1 – Y6067, J1 – Y6067	TRANSM , menu 8

				solenoid valve.		
				Check cable harness between the control unit and the component.		
73/02	Solenoid valve VFS 1/3 (Y6067), control current higher than 1400 mA.	Transmission in Limp-Home.	Check the solenoid valve.	D793/H1 – Y6067, J1 – Y6067	TRANSM	, menu 9
				Check cable harness between the control unit and the component.		
73/03	Solenoid valve VFS 1/3 (Y6067), control current outside approved interval (incorrect impedance).	Transmission in Limp-Home.	Check the solenoid valve.	D793/H1 – Y6067, J1 – Y6067	TRANSM	, menu 9
77/02	All gear packs disengaged.	Transmission locked in neutral (Shutdown).	–	–	–	–
Code	Description	Limitation	Action	Connection and component	Diagnostic menu	

			Check cable harness be- tween the control unit and the component.		
	Solenoid valve RSP Drive (Y6066), cable short-circuited to frame ground.	Transmission locked in neutral (Shutdown).	Check the solenoid valve.	D793/K1 – Y6066	TRANSM , menu 7

			Check cable harness be- tween the control unit and the component.		
	Solenoid valve RSP Drive (Y6066), cable is not connected or short- circuited to voltage.	Transmission locked in neutral (Shutdown).	Check the solenoid valve.	D793/K1 – Y6066	TRANSM , menu 7

			Check cable harness be- tween the control unit and the component.		
	Solenoid valve VFS 2/4 (Y6074), cable short- circuited to frame ground.	Transmission in Limp- Home.	Check the solenoid valve.	D793/E2 – Y6074	TRANSM , menu 7

			Check cable harness be- tween the control unit and the component.		
81/01	Solenoid valve VSF 2/4 (Y6074), cable is not connected or short- circuited to voltage.	Transmission in Limp- Home.	Check the solenoid valve.	D793/E2 – Y6074	TRANSM , menu 7
82/00	Solenoid valve VFS 1/3 (Y6075), cable short- circuited to frame ground.	Transmission in Limp- Home.	Check the solenoid valve.	D793/F2 – Y6075	TRANSM , menu 7
82/01	Solenoid valve VSF 1/3 (Y6075), cable is not connected or short- circuited to voltage.	Transmission in Limp- Home.	Check the solenoid valve.	D793/F2 – Y6075	TRANSM , menu 7
83/00	Solenoid valve RSP Drive	Transmission locked in	Check cabling to	D793/K2 – Y6066	TRANSM , menu 7

	(Y6066), cable short-circuited to frame ground.	neutral (Shutdown).	solenoid valve drive					Check solenoid valve drive.
83/01	Solenoid valve RSP Drive (Y6066), cable is not connected or short-circuited to voltage.	Transmission locked in neutral (Shutdown).	Check cabling to solenoid valve drive	Check solenoid valve drive.	D793/K2 – Y6066	TRANSM	, menu 7	

Code	Description	Limitation	Action	Connection and component	Diagnostic menu
90/xx – 99/xx	System error.	Transmission locked in neutral (Shutdown).	–	D793/ A:20	–
95/71	Control unit cannot interpret input data.	–	–		
99/90	Incorrect software in control unit transmission.	–	–		