



Abs\_system id 11

Hydr\_transmission id 39

## dtc trouble codes ABS\_system

SPN	FMI	Parameter	Failure mode	Categories
627	3	Power Supply	UVent1, Overvoltage Detection	ABS
627	3	Power Supply	UVent2, Overvoltage Detection	ABS
627	13	Power Supply	Faulty Compensation of Voltage (AD_NORM)	ABS
627	14	Power Supply	GND 2, Open Circuit Detection	ABS
629	8	ECU / System component	Excessive Slip on one axle / dynotester	ABS
629	9	ECU / System component	Modulator-Valve, activation-time	ABS
629	12	ECU / System component	Safety Controller - Internal Error / Permanent Valve Actuation - Internal Error Detection	ABS
629	12	ECU / System component	OSEK / Trap Handler	ABS
629	12	ECU / System component	OSEK / Watchdog Reset	ABS
629	13	ECU / System component	PCB Configuration Fault	ABS
629	14	ECU / System component	Sensor Memory Bit (Wheel Speed Sensing)	ABS
630	12	Calibration Memory / Parameter Conflict	EEPROM, Checksum Failure	ABS
630	13	Calibration Memory / Parameter Conflict	ABS System Fault / Incompatible Components Detection	ABS
631	2	System Configuration / System Setup mismatch	Faulty EBL System Configuration Detection	ABS
631	2	System Configuration / System Setup mismatch	Faulty ABS-RSC System Configuration Detection	ABS
631	2	System Configuration / System Setup mismatch	Faulty ABS System Configuration Detection	ABS
631	2	System Configuration / System Setup mismatch	EEPROM, Wheel Parameter incorrect	ABS
639	3	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / ETC	ABS
639	5	SAE J1939 Vehicle CAN Data Link	CAN Fault A / SAE J1939 Datalink Fault	ABS
639	6	SAE J1939 Vehicle CAN Data Link	SAE J1939 CCVSMesssage Failure Detection	ABS
639	7	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / ERC1	ABS
639	8	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / BRAKES - AIR1	ABS
639	9	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / EEC	ABS
639	10	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / EBC1	ABS
639	11	SAE J1939 Vehicle CAN Data Link	SAE J1939 Timeout Detection / AEBS1	ABS
701	3	Auxiliary I/O #01	AUX1-Output, Shorted to UB Detection	ABS
701	3	Auxiliary I/O #01	AUX1-Output, Short Circuit Detection	ABS
701	4	Auxiliary I/O #01	AUX1-Output, Shorted to GND Detection	ABS
701	5	Auxiliary I/O #01	AUX1-Output, Open Circuit Detection	ABS
701	13	Auxiliary I/O #01	AUX1-Output, Configuration Error	ABS
702	3	Auxiliary I/O #02	AUX2-Output, Shorted to UB Detection	ABS
702	13	Auxiliary I/O #02	AUX2-Output, Configuration Error	ABS
703	3	Auxiliary I/O #03	AUX3-Output, Shorted to UB Detection	ABS
703	3	Auxiliary I/O #03	AUX3-Output, Short Circuit Detection	ABS
703	4	Auxiliary I/O #03	AUX3-Output, Shorted to GND Detection	ABS
703	5	Auxiliary I/O #03	AUX3-Output, Open Circuit Detection	ABS
703	13	Auxiliary I/O #03	AUX3-Output, Configuration Error	ABS
704	3	Auxiliary I/O #04	AUX4-Output, Shorted to UB Detection	ABS
704	3	Auxiliary I/O #04	AUX4-Output, Short Circuit Detection	ABS
704	4	Auxiliary I/O #04	AUX4-Output, Shorted to GND Detection	ABS
704	5	Auxiliary I/O #04	AUX4-Output, Open Circuit Detection	ABS
704	13	Auxiliary I/O #04	AUX4-Output, Configuration Error	ABS
705	13	Auxiliary I/O #05	AUX5-Output, Configuration Error	ABS
706	13	Auxiliary I/O #06	AUX6-Output, Configuration Error	ABS
789	1	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Air Gap Detection (FA left)	ABS
789	2	Wheel Speed Sensor Front Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty (FA left)	ABS
789	2	Wheel Speed Sensor Front Axle Left	Incorrect Tire Dimension Detection, beyond 24% faulty (FA left)	ABS
789	2	Wheel Speed Sensor Front Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (FA left)	ABS
789	3	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Short Circuit to UB Detection (FA left)	ABS
789	4	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Short Circuit to GND Detection (FA left)	ABS
789	5	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Open Circuit, Interruption Detection (FA left)	ABS
789	6	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Short Circuited Coil Detection (FA left)	ABS
789	7	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (FA left)	ABS
789	8	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Lambda-timer Detection (FA left), permanent slip	ABS
789	9	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Wires Mismatched Detection (FA left)	ABS
789	10	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Speed Drop-Out Upward (FA left)	ABS
789	10	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Speed Drop-Out Downward (FA left)	ABS
789	11	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor Abnormal Speed Detection (FA left)	ABS
789	12	Wheel Speed Sensor Front Axle Left	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (FA left)	ABS
790	1	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Air Gap Detection (FA right)	ABS
790	2	Wheel Speed Sensor Front Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty (FA right)	ABS
790	2	Wheel Speed Sensor Front Axle Right	Incorrect Tire Dimension Detection, beyond 24% faulty (FA right)	ABS

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790	2	Wheel Speed Sensor Front Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (FA right)	ABS
790	3	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Short Circuit to UB Detection (FA right)	ABS
790	4	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Short Circuit to GND Detection (FA right)	ABS
790	5	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Open Circuit, Interruption Detection (FA right)	ABS
790	6	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Short Circuited Coil Detection (FA right)	ABS
790	7	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (FA right)	ABS
790	8	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Lambdatimer Detection (FA right), permanent slip	ABS
790	9	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Wires Mismatched Detection (FA right)	ABS
790	10	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Speed Drop-Out Upward (FA right)	ABS
790	10	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Speed Drop-Out Downward (FA right)	ABS
790	11	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor Abnormal Speed Detection (FA right)	ABS
790	12	Wheel Speed Sensor Front Axle Right	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (FA right)	ABS
791	1	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Air Gap Detection (RA left)	ABS
791	2	Wheel Speed Sensor Drive Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty (RA left)	ABS
791	2	Wheel Speed Sensor Drive Axle Left	Incorrect Tire Dimension Detection, beyond 24% faulty (RA left)	ABS
791	2	Wheel Speed Sensor Drive Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (RA left)	ABS
791	3	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Short Circuit to UB Detection (RA left)	ABS
791	4	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Short Circuit to GND Detection (RA left)	ABS
791	5	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Open Circuit, Interruption Detection (RA left)	ABS
791	6	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Short Circuited Coil Detection (RA left)	ABS
791	7	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (RA left)	ABS
791	8	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Lambdatimer Detection (RA left), permanent slip	ABS
791	9	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Wires Mismatched Detection (RA left)	ABS
791	10	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Speed Drop-Out Upward (RA left)	ABS
791	10	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Speed Drop-Out Downward (RA left)	ABS
791	11	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor Abnormal Speed Detection (RA left)	ABS
791	12	Wheel Speed Sensor Drive Axle Left	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (RA left)	ABS
792	1	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Air Gap Detection (RA right)	ABS
792	2	Wheel Speed Sensor Drive Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty (RA right)	ABS
792	2	Wheel Speed Sensor Drive Axle Right	Incorrect Tire Dimension Detection, beyond 24% faulty (RA right)	ABS
792	2	Wheel Speed Sensor Drive Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (RA right)	ABS
792	3	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Short Circuit to UB Detection (RA right)	ABS
792	4	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Short Circuit to GND Detection (RA right)	ABS
792	5	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Open Circuit, Interruption Detection (RA right)	ABS
792	6	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Short Circuited Coil Detection (RA right)	ABS
792	7	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (RA right)	ABS
792	8	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Lambdatimer Detection (RA right), permanent slip	ABS
792	9	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Wires Mismatched Detection (RA right)	ABS
792	10	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Speed Drop-Out Upward (RA right)	ABS
792	10	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Speed Drop-Out Downward (RA right)	ABS
792	11	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor Abnormal Speed Detection (RA right)	ABS
792	12	Wheel Speed Sensor Drive Axle Right	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (RA right)	ABS
793	1	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Air Gap Detection (IA left)	ABS
793	2	Wheel Speed Sensor Intermediate Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty (IA left)	ABS
793	2	Wheel Speed Sensor Intermediate Axle Left	Incorrect Tire Dimension Detection, beyond 24% faulty (IA left)	ABS
793	2	Wheel Speed Sensor Intermediate Axle Left	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (IA left)	ABS
793	3	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Short Circuit to UB Detection (IA left)	ABS
793	4	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Short Circuit to GND Detection (IA left)	ABS
793	5	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Open Circuit, Interruption Detection (IA left)	ABS
793	6	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Short Circuited Coil Detection (IA left)	ABS
793	7	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (IA left)	ABS
793	8	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Lambdatimer Detection (IA left), permanent slip	ABS
793	9	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Wires Mismatched Detection (IA left)	ABS
793	10	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Speed Drop-Out Upward (IA left)	ABS
793	10	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Speed Drop-Out Downward (IA left)	ABS
793	11	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor Abnormal Speed Detection (IA left)	ABS
793	12	Wheel Speed Sensor Intermediate Axle Left	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (IA left)	ABS
794	1	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Air Gap Detection (IA right)	ABS
794	2	Wheel Speed Sensor Intermediate Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty (IA right)	ABS
794	2	Wheel Speed Sensor Intermediate Axle Right	Incorrect Tire Dimension Detection, beyond 24% faulty (IA right)	ABS
794	2	Wheel Speed Sensor Intermediate Axle Right	Incorrect Tire Dimension Detection, beyond 10% faulty, Axle (IA right)	ABS
794	3	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Short Circuit to UB Detection (IA right)	ABS
794	4	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Short Circuit to GND Detection (IA right)	ABS

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794	5	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Open Circuit, Interruption Detection (IA right)	ABS
794	6	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Short Circuited Coil Detection (IA right)	ABS
794	7	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor, cyclic Failure, Incorrect Pole Wheel Detection (IA right)	ABS
794	8	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Lambdatimer Detection (IA right), permanent slip	ABS
794	9	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Wires Mismatched Detection (IA right)	ABS
794	10	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Speed Drop-Out Upward (IA right)	ABS
794	10	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Speed Drop-Out Downward (IA right)	ABS
794	11	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor Abnormal Speed Detection (IA right)	ABS
794	12	Wheel Speed Sensor Intermediate Axle Right	Wheel Speed Sensor, Detection of Inadmissible High Frequencies (IA right)	ABS
795	3	Modulator Valve Front Axle Left	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (FA left)	ABS
795	3	Modulator Valve Front Axle Left	ABS Modulator OV- Valve Short Circuit to UB Detection (FA left)	ABS
795	3	Modulator Valve Front Axle Left	ABS Modulator IV-Valve Short Circuited Coil Detection (FA left)	ABS
795	3	Modulator Valve Front Axle Left	ABS Modulator OV- Valve Short Circuited Coil Detection (FA left)	ABS
795	5	Modulator Valve Front Axle Left	ABS Modulator IV-Valve Open Circuit, Interruption Detection (FA left)	ABS
795	5	Modulator Valve Front Axle Left	ABS Modulator OV- Valve Open Circuit, Interruption Detection (FA left)	ABS
795	6	Modulator Valve Front Axle Left	ABS Modulator IV-Valve Short Circuit to GND Detection (FA left)	ABS
795	6	Modulator Valve Front Axle Left	ABS Modulator OV- Valve Short Circuit to GND Detection (FA left)	ABS
796	3	Modulator Valve Front Axle Right	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (FA right)	ABS
796	3	Modulator Valve Front Axle Right	ABS Modulator OV- Valve Short Circuit to UB Detection (FA right)	ABS
796	3	Modulator Valve Front Axle Right	ABS Modulator IV-Valve Short Circuited Coil Detection (FA right)	ABS
796	3	Modulator Valve Front Axle Right	ABS Modulator OV- Valve Short Circuited Coil Detection (FA right)	ABS
796	5	Modulator Valve Front Axle Right	ABS Modulator IV-Valve Open Circuit, Interruption Detection (FA right)	ABS
796	5	Modulator Valve Front Axle Right	ABS Modulator OV- Valve Open Circuit, Interruption Detection (FA right)	ABS
796	6	Modulator Valve Front Axle Right	ABS Modulator IV-Valve Short Circuit to GND Detection (FA right)	ABS
796	6	Modulator Valve Front Axle Right	ABS Modulator OV- Valve Short Circuit to GND Detection (FA right)	ABS
797	3	Modulator Valve Drive Axle Left	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (RA left)	ABS
797	3	Modulator Valve Drive Axle Left	ABS Modulator OV- Valve Short Circuit to UB Detection (RA left)	ABS
797	3	Modulator Valve Drive Axle Left	ABS Modulator IV-Valve Short Circuited Coil Detection (RA left)	ABS
797	3	Modulator Valve Drive Axle Left	ABS Modulator OV- Valve Short Circuited Coil Detection (RA left)	ABS
797	5	Modulator Valve Drive Axle Left	ABS Modulator IV-Valve Open Circuit, Interruption Detection (RA left)	ABS
797	5	Modulator Valve Drive Axle Left	ABS Modulator OV- Valve Open Circuit, Interruption Detection (RA left)	ABS
797	6	Modulator Valve Drive Axle Left	ABS Modulator IV-Valve Short Circuit to GND Detection (RA left)	ABS
797	6	Modulator Valve Drive Axle Left	ABS Modulator OV- Valve Short Circuit to GND Detection (RA left)	ABS
798	3	Modulator Valve Drive Axle Right	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (RA right)	ABS
798	3	Modulator Valve Drive Axle Right	ABS Modulator OV- Valve Short Circuit to UB Detection (RA right)	ABS
798	3	Modulator Valve Drive Axle Right	ABS Modulator IV-Valve Short Circuited Coil Detection (RA right)	ABS
798	3	Modulator Valve Drive Axle Right	ABS Modulator OV- Valve Short Circuited Coil Detection (RA right)	ABS
798	5	Modulator Valve Drive Axle Right	ABS Modulator IV-Valve Open Circuit, Interruption Detection (RA right)	ABS
798	5	Modulator Valve Drive Axle Right	ABS Modulator OV- Valve Open Circuit, Interruption Detection (RA right)	ABS
798	6	Modulator Valve Drive Axle Right	ABS Modulator IV-Valve Short Circuit to GND Detection (RA right)	ABS
798	6	Modulator Valve Drive Axle Right	ABS Modulator OV- Valve Short Circuit to GND Detection (RA right)	ABS
799	3	Modulator Valve Intermediate Axle Left	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (IA left)	ABS
799	3	Modulator Valve Intermediate Axle Left	ABS Modulator OV- Valve Short Circuit to UB Detection (IA left)	ABS
799	3	Modulator Valve Intermediate Axle Left	ABS Modulator IV-Valve Short Circuited Coil Detection (IA left)	ABS
799	3	Modulator Valve Intermediate Axle Left	ABS Modulator OV- Valve Short Circuited Coil Detection (IA left)	ABS
799	5	Modulator Valve Intermediate Axle Left	ABS Modulator IV-Valve Open Circuit, Interruption Detection (IA left)	ABS
799	5	Modulator Valve Intermediate Axle Left	ABS Modulator OV- Valve Open Circuit, Interruption Detection (IA left)	ABS
799	6	Modulator Valve Intermediate Axle Left	ABS Modulator IV-Valve Short Circuit to GND Detection (IA left)	ABS
799	6	Modulator Valve Intermediate Axle Left	ABS Modulator OV- Valve Short Circuit to GND Detection (IA left)	ABS
800	3	Modulator Valve Intermediate Axle Right	ABS Modulator IV-Valve Short Circuit to UB Detection / Power Driver Break Down Detection (IA right)	ABS
800	3	Modulator Valve Intermediate Axle Right	ABS Modulator OV- Valve Short Circuit to UB Detection (IA right)	ABS
800	3	Modulator Valve Intermediate Axle Right	ABS Modulator IV-Valve Short Circuited Coil Detection (IA right)	ABS
800	3	Modulator Valve Intermediate Axle Right	ABS Modulator OV- Valve Short Circuited Coil Detection (IA right)	ABS
800	5	Modulator Valve Intermediate Axle Right	ABS Modulator IV-Valve Open Circuit, Interruption Detection (IA right)	ABS
800	5	Modulator Valve Intermediate Axle Right	ABS Modulator OV- Valve Open Circuit, Interruption Detection (IA right)	ABS
800	6	Modulator Valve Intermediate Axle Right	ABS Modulator IV-Valve Short Circuit to GND Detection (IA right)	ABS
800	6	Modulator Valve Intermediate Axle Right	ABS Modulator OV- Valve Short Circuit to GND Detection (IA right)	ABS
801	3	Retarder Control Relay	Endurance Brake Relay, Shorted to UB Detection	ABS
801	5	Retarder Control Relay	Endurance Brake Relay, Open Circuit Detection	ABS
801	6	Retarder Control Relay	Endurance Brake Relay, Shorted to GND Detection	ABS
801	13	Retarder Control Relay	Endurance Brake Relay, Configuration Error	ABS
802	1	Relay Diagonal 1	UVent1, Interruption Detection / Voltage supply axles 1+2+Dif, open circuit	ABS
802	3	Relay Diagonal 1	Dif-OV (LD1), Shorted to UB Detection	ABS

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802	4	Relay Diagonal 1	UVent1, Undervoltage Detection / Voltage supply axles 1+2+Dif, low voltage	ABS
802	5	Relay Diagonal 1	Dif-OV (LD1), High Impedance Detection	ABS
802	6	Relay Diagonal 1	Dif-OV (LD1), Shorted to GND Detection	ABS
802	7	Relay Diagonal 1	Voltage supply axles 1+2+Dif, internal relay '1' does not open	ABS
803	1	Relay Diagonal 2	UVent2, Interruption Detection / Voltage supply, axle 3 + Aux. open circuit	ABS
803	3	Relay Diagonal 2	Dif-OV (LD2), Shorted to UB Detection	ABS
803	4	Relay Diagonal 2	UVent2, Undervoltage Detection / Voltage supply, axle 3 + Aux.Low voltage	ABS
803	5	Relay Diagonal 2	Dif-OV (LD2), High Impedance Detection	ABS
803	6	Relay Diagonal 2	Dif-OV (LD2), Shorted to GND Detection	ABS
803	7	Relay Diagonal 2	Voltage supply 3rd axle+ Aux., internal relay '2' does not open (not for ABS Basic system)	ABS
806	3	3/2 Solenoid Valve Rear Axle(s)	Diff. Brake Valve, shorted to UBATT	ABS
806	3	3/2 Solenoid Valve Rear Axle(s)	Diff. Brake Valve, short circuit	ABS
806	4	3/2 Solenoid Valve Rear Axle(s)	Diff. Brake Valve, shorted to ground	ABS
806	5	3/2 Solenoid Valve Rear Axle(s)	Diff. Brake Valve, open circuit	ABS
806	13	3/2 Solenoid Valve Rear Axle(s)	Diff. Brake Valve, Configuration Error	ABS
807	3	3/2 Solenoid Valve Front Axle(s)	FA Brake Valve, shorted to UBATT	ABS
807	3	3/2 Solenoid Valve Front Axle(s)	FA Brake Valve, short circuit	ABS
807	4	3/2 Solenoid Valve Front Axle(s)	FA Brake Valve, shorted to ground	ABS
807	5	3/2 Solenoid Valve Front Axle(s)	FA Brake Valve, open circuit	ABS
807	13	3/2 Solenoid Valve Front Axle(s)	FA Brake Valve, Configuration Error	ABS
810	13	Speed Signal Input	Plausibility Speedometer - Yawrate	ABS
810	14	Speed Signal Input	ABS Wheel Speed Sensor, Absence of Repair Monitoring	ABS
811	5	Tractor ABS Warning Lamp	Warning Light, WL- Relay (E-Frame)	ABS
1042	9	Electronic Tractor/Trailer CAN Interface (ISO 11992)	Detection of Communication Failure at ISO 11992Truck/Trailer CAN- Interface	ABS
1042	11	Electronic Tractor/Trailer CAN Interface (ISO 11992)	Bus Off Detection at ISO 11992 Truck/Trailer CAN-Interface	ABS
1042	12	Electronic Tractor/Trailer CAN Interface (ISO 11992)	Electronic Trailer Braking System / Internal Failure	ABS
1042	14	Electronic Tractor/Trailer CAN Interface (ISO 11992)	Detection of Faulty CAN Highline at ISO 11992 Truck/Trailer Interface	ABS
1042	14	Electronic Tractor/Trailer CAN Interface (ISO 11992)	Detection of Faulty CAN Lowline at ISO 11992 Truck/Trailer Interface	ABS
1049	3	Pressure Sensor 1 / Analog input 1	Pressure Sensor Failure 1 (shorted to UBATT, Permanent Pressure Signal Detection)	ABS
1049	5	Pressure Sensor 1 / Analog input 1	Pressure Sensor Failure 1 (open circuit or shorted to ground / Permanent 0Bar Detection)	ABS
1049	13	Pressure Sensor 1 / Analog input 1	Sensor #1, Configuration Error	ABS
1050	1	Pressure Control / Supply Pressure	ABS System Reservoir Pressure, Protection function active	ABS
1052	13	Pressure Sensor 2 / Analog input 2	Sensor #2, Configuration Error	ABS
1055	13	Pressure Sensor 3 / Analog input 3	Sensor #3, Configuration Error	ABS
1056	3	3/2 Solenoid Valve Trailer	Trailer Brake / RSC 3/2 Solenoid Valve, shorted to UBATT	ABS
1056	3	3/2 Solenoid Valve Trailer	Trailer Brake / RSC 3/2 Solenoid Valve, short circuit	ABS
1056	4	3/2 Solenoid Valve Trailer	Trailer Brake / RSC 3/2 Solenoid Valve, shorted to ground	ABS
1056	5	3/2 Solenoid Valve Trailer	Trailer Brake / RSC 3/2 Solenoid Valve, open circuit	ABS
1056	13	3/2 Solenoid Valve Trailer	Trailer Brake / RSC 3/2 Solenoid Valve, Configuration Error	ABS
1069	1	Tire Pressure	Tire Pressure Monitoring, Pressure Fault Detection (resetable)	ABS
1069	1	Tire Pressure	Tire Pressure Monitoring, Pressure Fault Detection (not resetable)	ABS
1070	0	Vehicle Deceleration Control	XBR #4 Checksum / Block Data Counter	ABS
1070	2	Vehicle Deceleration Control	XBR #1 Checksum / Block Data Counter	ABS
1070	3	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #4 Demand	ABS
1070	3	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #4 Demand	ABS
1070	4	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #5 Demand	ABS
1070	4	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #5 Demand	ABS
1070	5	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #6 Demand	ABS
1070	5	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #6 Demand	ABS
1070	6	Vehicle Deceleration Control	XBR #5 Checksum / Block Data Counter	ABS
1070	7	Vehicle Deceleration Control	XBR #6 Checksum / Block Data Counter	ABS
1070	8	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #1 Demand	ABS
1070	8	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #1 Demand	ABS
1070	9	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #2 Demand	ABS
1070	9	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #2 Demand	ABS
1070	10	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Inactive XBR #3 Demand	ABS
1070	10	Vehicle Deceleration Control	SAE 1939 Timeout Detection / Active XBR #3 Demand	ABS
1070	11	Vehicle Deceleration Control	XBR #2 Checksum / Block Data Counter	ABS
1070	12	Vehicle Deceleration Control	XBR #3 Checksum / Block Data Counter	ABS
1070	13	Vehicle Deceleration Control	XBR Parameter Failure	ABS
1070	13	Vehicle Deceleration Control	AEBS Parameter Failure	ABS
1204	5	No Loads Connected	Electronic w/o Loads Detection	ABS
1807	0	Steering-Wheel Angle Sensor / CAN Data Link	Yaw Rate Cross Check (SAS)	ABS

## dtc trouble codes ABS\_system

1807	1	Steering-Wheel Angle Sensor / CAN Data Link	SAS Minimum Dynamic Check	ABS
1807	2	Steering-Wheel Angle Sensor / CAN Data Link	Monitoring of Petri SAS/ Signalfailure	ABS
1807	3	Steering-Wheel Angle Sensor / CAN Data Link	Monitoring of Petri SAS/ CAN-Failure	ABS
1807	4	Steering-Wheel Angle Sensor / CAN Data Link	Check of Availability of Steering Angle Sensorinformation	ABS
1807	5	Steering-Wheel Angle Sensor / CAN Data Link	Monitoring of Petri SAS/ Undervoltage	ABS
1807	6	Steering-Wheel Angle Sensor / CAN Data Link	Monitoring of Japanese SAS / SAE CAN Failure	ABS
1807	7	Steering-Wheel Angle Sensor / CAN Data Link	Plausibility Check of Steering Ratio	ABS
1807	8	Steering-Wheel Angle Sensor / CAN Data Link	Calibration Failure of SAS	ABS
1807	9	Steering-Wheel Angle Sensor / CAN Data Link	Timeout and Checksum Failure of SAS CAN Message (SAE J 1939 CAN, internal CAN)	ABS
1807	10	Steering-Wheel Angle Sensor / CAN Data Link	SAS CAN Message Blockdata Check (SAE J 1939 CAN /Brakesystem CAN)	ABS
1807	11	Steering-Wheel Angle Sensor / CAN Data Link	Monitoring of Petri SAS/ Internal Failure	ABS
1807	12	Steering-Wheel Angle Sensor / CAN Data Link	Correct Signal Range of SAS Signal	ABS
1807	13	Steering-Wheel Angle Sensor / CAN Data Link	Check of Correct ESC Parameters (SAS yes/no, Undefined SAS Type)	ABS
1807	14	Steering-Wheel Angle Sensor / CAN Data Link	Check of SAS Sensor Signal (Invalid Range, Dynamic)	ABS
1807	14	Steering-Wheel Angle Sensor / CAN Data Link	SAS Offset Fault	ABS
1807	14	Steering-Wheel Angle Sensor / CAN Data Link	Check of SAS Sensor Signal (Front Wheel Steer Angle)	ABS
2622	2	Hill Start Aid system	HSA Monitoring	ABS
3509	3	Sensor Voltage Supply	Sensor Voltage Supply, short circuit to permanent UB	ABS
3509	4	Sensor Voltage Supply	Sensor Voltage Supply, shorted to ground	ABS
520210	0	Electronic Stability Control System (CAN Data Link / ESC Module)	Yaw Rate Cross Check (AQ-YAW)	ABS
520210	1	Electronic Stability Control System (CAN Data Link / ESC Module)	Temporary ESC Deactivation	ABS
520210	2	Electronic Stability Control System (CAN Data Link / ESC Module)	Faulty ESC System Configuration (Detected by ABS ECU)	ABS
520210	2	Electronic Stability Control System (CAN Data Link / ESC Module)	Faulty ESC System Configuration (Detected By ESC-Module)	ABS
520210	2	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Parameterset Faulty	ABS
520210	3	Electronic Stability Control System (CAN Data Link / ESC Module)	Reserved ESC failurebit	ABS
520210	3	Electronic Stability Control System (CAN Data Link / ESC Module)	Reserved ESC failurebit	ABS
520210	3	Electronic Stability Control System (CAN Data Link / ESC Module)	Reserved ESC failurebit	ABS
520210	4	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Module Undervoltage Detection	ABS
520210	5	Electronic Stability Control System (CAN Data Link / ESC Module)	BusOff Status CAN / Warning Status CAN (Internal ESC Brake System CAN)	ABS
520210	6	Electronic Stability Control System (CAN Data Link / ESC Module)	Yawrate Sign Plausibility (Extended)	ABS
520210	7	Electronic Stability Control System (CAN Data Link / ESC Module)	Faulty ESC Module Mounting	ABS
520210	8	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Barcode Failure (Part 1 and 2)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Message Timeout Detection	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Message Checksum Detection	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of ABS-ECU Message Timeout Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of ABS-ECU Message Checksum Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of Rear Axle Message Timeout Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of Rear Axle Message Checksum Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of Intermediate Axle Message Timeout Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	Detection of Intermediate Axle Message Checksum Failure (by ESC- Module)	ABS
520210	9	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Parameterset / Transmission Delayed	ABS
520210	10	Electronic Stability Control System (CAN Data Link / ESC Module)	Yawrate Plausibility (Straight On)	ABS
520210	12	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of Lateral Acceleration Sensor in ESC-Module	ABS
520210	12	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of Yaw Rate Sensor in ESC-Module	ABS
520210	12	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of EEPROM in ESC-Module	ABS
520210	12	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of Internal Devices in ESC-Module	ABS
520210	12	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC CAN Message Blockdata Check	ABS
520210	13	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of Correct ESC Parameters (Invalid Wheelbase / Invalid Vehicle Type / Invalid Steering Type of 3rd Axle / Invalid Characteristic of Steering Ratio)	ABS
520210	13	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Parameter Failure (Detected by ESC- Module)	ABS
520210	13	Electronic Stability Control System (CAN Data Link / ESC Module)	Check of Correct ESC Parameters (ESC Module yes/no)	ABS
520210	14	Electronic Stability Control System (CAN Data Link / ESC Module)	ESC Initialisation Not Completed	ABS
520211	2	Electronic Stability Control System (CAN Data Link / Steering Angle Sensor / ESC Module)	SAE J1939 ESC1Steering Signal Incorrect	ABS
520211	7	Electronic Stability Control System (CAN Data Link / Steering Angle Sensor / ESC Module)	Plausibility of Liftaxle	ABS