Model: Abarth 124 Spider

Key

eLEARN: Information available upon purchase of a subscription to the **On-line technical documentation** with **Manual** and **Abarth** filters, for a 1 hour, 1 day, 1 month or 1 year duration.

eLUM: information available free of charge on the electronic version of the Use and Maintenance Handbook. The section where information is found is indicated.

N/A: item not applicable for the model.

ODX: Information available through ODX ISO22900 **for test instrument manufacturers** to use during tests. The provision is subject to a **supplier contract**, as a result of negotiation, as provided by regulation R858/2018. The instructions for use of the electronic interface will be provided by the instrument manufacturers.

Inspection information

1. Braking system

Item	Method	Necessary information	Available information
1.6. Anti-lock braking system (ABS)	Visual inspection and checking of the alarm device and/or using the vehicle's electronic interface.	Instructions for using the vehicle's electronic interface	**ODX 357 ABS Part2**
1.7. Electronic braking system (EBS)	Visual inspection and checking of the alarm device and/or using the vehicle's electronic interface.	Instructions for using the vehicle's electronic interface	**ODX 357 ABS Part2**

1.1. Mechanical condition and operation

Item	Method	Necessary information	Available information
1.1.6. Parking brake, control lever, locking device, electronic parking brake	Visual exam of components while the braking system is activated.	General description of the electronic parking brake	N/A
1.1.13. Brake seals	Visual inspection.	Method for evaluating wear and limits of wear *See UN R13 5.2.1.11.2 e 5.2.2.8.2.*	Data gathering in progress
1.1.14. Brake drums, brake discs	Visual inspection.	Method for evaluating wear and limits of wear *See UN R13 5.2.1.11.2 e 5.2.2.8.2.*	Data gathering in progress

1.2. Service brake performance and effectiveness

Item	Method	Necessary information	Available information
1.2.1. Performance	During inspection on a brake test bench or, if impossible, during a road test, pump the brakes progressively up to maximum effort.	Specific requirements for inspecting a vehicle on a brake test bench (test method)	Data gathering in progress

1.3. Handbrake performance and effectiveness (if based on a separate system)

Item	Method	Necessary information	Available information
1.3.1. Performance	If the secondary brake system is separate from the service brake, use the method specified in point 1.2.1.	General description of the system, including the circuits (clear definition of secondary brake)	Data gathering in progress

1.4. Parking brake performance and effectiveness

Item	Method	Necessary information	Available information
1.4.1. Performance	Activate the brake during a brake test bench inspection.	General description of the system, including the recommended test procedure; if a dynamic test is not possible (on a brake test bench or a road test)	Data gathering in progress

2. Steering

Item	Method	Necessary information	Available information
2.6. Electronic power steering (EPS)	Visual exam and inspection of coherence between the steering wheel angle and the wheel angle when the engine is turned on/off and/or the vehicle electronic interface is in use.	Instructions for using the vehicle's electronic interface	**ODX SKY EPAS Part2**

4. Lights, reflectors and electric circuit

Item	Method	Necessary information	Available information
4.11. Electric circuit	Visual exam, with the vehicle over an inspection pit or on a lift, also inside the engine compartment if applicable.	Identifying the wires (for example colour, diagramming, transverse section, dimensions) insulation inspection (high voltage)	**eLEARN:** Model 348-124 Spider; 1.4 Turbo Multiair; Electrical system *For wire identification:* 2 – Wiring *For specific information:* 3 – Connectors; analysing the specific connectors linked to the wiring identified earlier
		Position of the high voltage electrical systems	N/A
4.13. Battery(ies)	Visual inspection.	Battery position(s)	**eLEARN:** Model 348-124 Spider; 1.4 Turbo Multiair; Electrical system; 1 – Electrical functions; E10 – Power supply and earths; E1010 – Power supply; Component location; A010
		Number of batteries	1

Item	Method	Necessary information	Available information
		Special arrangement for high voltage batteries	N/A
		Vehicle specific information (VIN) relating to the battery switch [Yes/No]	No
		Vehicle specific information (VIN) relating to the battery fuse [Yes/No]	No
		Vehicle specific information (VIN) relating to the battery ventilation [Yes/No]	No
		Vehicle specific information (VIN) relating to the operating principle	No

4.1. Headlights

Item	Method	Necessary information	Available information
4.1.1. Status and function	Visual exam and operating verification.	Light source category [.....]	**eLUM:** Abarth 124 Spider; Owner Handbook; In case of emergency; Replacing a bulb; Exterior light
4.1.2. Alignment	Determining the horizontal orientation for each headlight in low beam position by using a headlight orientation device or the vehicle's electronic interface.	Alignment of the low beam set [percentage] for the vertical tilt and the direction	With driver only: Driver -0.98%; Passenger -0.98% With passengers only: Driver -1.18%; Passenger -1.10% With passengers and full load: Driver -1.17%; Passenger -1.10% With driver and full load: Driver -1.03%; Passenger -0.95%
		Instructions for using the vehicle's electronic interface	**ODX SKY BCM Part2** **SKY AFLS Part2** for the automatic version
		Determining the horizontal orientation using the vehicle's electronic interface information relative to the high beam set to allow the alignment value	**ODX SKY BCM Part2** **SKY AFLS Part2** for the automatic version
4.1.3. Ignition	Visual inspection and operation verification or using the vehicle's electronic interface.	Instructions for using the vehicle's electronic interface	**ODX SKY BCM Part2** **SKY AFLS Part2** for the automatic version
4.1.5 Devices to adjust tilt (if mandatory)	Visual inspection and operation verification, if possible, or using the vehicle's electronic interface.	Transmission operating modes [manual/automatic]	Both versions exist
		Instructions for using the vehicle's electronic interface	**ODX SKY BCM Part2**

Item	Method	Necessary information	Available information
			SKY AFLS Part2 for the automatic version
4.1.6 Headlight wiper device (if mandatory)	Visual exam and operating verification if possible.	Mandatory device [Yes/No]	No

4.2. Front and rear position lights, side lights, clearance lights, daytime running lights

Item	Method	Necessary information	Available information
4.2.1. Status and function	Visual exam and operating verification.	Daytime running light installation [Yes/No]	Yes

4.3. Brake lights

Item	Method	Necessary information	Available information
4.3.2. Ignition	Visual inspection and operation verification or using the vehicle's electronic interface.	Emergency stop signal installation [Yes/No]	No
		Instructions for using the vehicle's electronic interface	N/A

5. Axles, wheels, tyres and suspensions

5.1. Axles

Item	Method	Necessary information	Available information
5.1.1. Axles	Visual exam, with vehicle above an inspection pit or on a lift. Wheel play detectors can be used and are recommended for vehicles with a maximum mass exceeding 3.5 tonnes	General description, number of axles	2 axle vehicle

5.2. Wheels and tyres

Item	Method	Necessary information	Available information
5.2.2. Wheels	Visual exam of both sides of each wheel, with vehicle above an inspection pit or on a lift.	Wheel measurement/dimensions/misalignment	**eLUM:** Abarth 124 Spider; Owner Handbook; Technical specifications; Wheel and tire specficiations; Rims and tires provided Data gathering in progress for misalignment
5.2.3. Tyres	Visual exam of the entire tyre, turning the wheel off the ground with the vehicle above an inspection pit, on a lift, or moving the vehicle forwards and backwards over an inspection pit.	Dimensions, load capacity, tyre speed category	**eLUM:** Abarth 124 Spider; Owner Handbook; Technical specifications; Wheel and tire specficiations; Rims and tires provided
		Tyre pressure check system [No/Yes] direct/indirect	Yes, indirect

6. Chassis and components attached to the chassis

6.1. Chassis or body and components attached to the chassis

Item	Method	Necessary information	Available information
6.1.3. Fuel tanks and pipes (including heating fuel tanks and pipes)	Visual exam, with the vehicle above an inspection pit or on a lift and, for LPG/CNG/LNG systems, use leak detection devices.	General description and position, also the shielding	Metal tank in lower rear position, in front of the rear axle
6.1.9. Engine performance (X[1])	Visual exam and/or using the vehicle's electronic interface	Valid configuration of the engine control unit	Data gathering in progress
		Instructions for using the vehicle's electronic interface	Data gathering in progress
		Instructions for reading the calibration identification	Data gathering in progress
		Information on identifying the calibration during validity	Data gathering in progress
		Software identification number, including the inspection totals or similar data about condition	Data gathering in progress

6.2. Passenger cabin and body

Item	Method	Necessary information	Available information
6.2.6. Other seats	Visual inspection.	Total number of seats (excluding driver's seat)	1 front
		Number of reverse seats	0

7. Other equipment

Item	Method	Necessary information	Available information
7.11. Odometer if available (X[1])	Visual exam and/or using the electronic interface.	Instructions for using the vehicle's electronic interface	**ODX SKY HEC Part2**
7.12 Electronic stability control (ESC) if installed/required	Visual exam and/or using the electronic interface.	Instructions for using the vehicle's electronic interface	**ODX SKY DSC Part2**

7.1. Safety belts/buckles and restraining systems (concerning the L categories: L6/L7)

Item	Method	Necessary information	Available information
7.1.1. Seat belt/buckle installation security	Visual inspection.	Number and position of seat belt anchor points	2 belts with three external anchor points on the car chassis and internal anchor point on the seat structure
7.1.2 Seat belt/buckle installation status	Visual exam and operating verification.	Seat belt category for each seating position	All the belts have energy absorption devices and retractors
7.1.3 Seat belt load limit	Visual exam and/or using the electronic interface.	Instructions for using the vehicle's electronic interface	**ODX SKY RCM Part2**

Item	Method	Necessary information	Available information
7.1.4. Seat belts pre-tensioners	Visual exam and/or using the electronic interface.	Instructions for using the vehicle's electronic interface	**ODX SKY RCM Part2**
7.1.5. Airbag	Visual exam and/or using the electronic interface.	Airbag number and positions	**eLEARN:** Model 348-124 Spider; 1.4 Turbo Multiair; Electrical system; 1 – Electrical functions; E70 – Vehicle electronic systems; E7030 – Airbags; Component location
		Instructions for using the vehicle's electronic interface	**ODX SKY RCM Part2**
7.1.6. SRS system	Visual exam of breakdown indicator and/or using the electronic interface	Instructions for using the vehicle's electronic interface	**ODX SKY RCM Part2**

8. Harmful effects

8.1. Noise

Item	Method	Necessary information	Available information
8.1.1 Noise protection system	Subjective evaluation (unless the inspector considers the noise level to be within the legal limits, in which case a sound level meter can be used to measure the noise coming from the stationary vehicle).	Stationary vehicle sound levels [dB(A) at 1/min]	82 db(A) at 2.850 rpm

8.2. Exhaust emissions

8.2.1. Mechanical condition and operation

Item	Method	Necessary information		Available information
8.2.1.1. Exhaust emission control equipment	Visual inspection.	Overall description of the exhaust emission control system Anti-particulate filter installed [Yes/No]		**eLEARN:** Model 348-124 Spider; 1.4 Turbo Multiair; Manual; Engine; Descriptions; 10 - General Anti-particulate filter not installed
8.2.1.2. Gaseous emissions	— For vehicles up to Euro 5 and Euro V[2] emission class: measurement with an exhaust gas analyser in compliance with the requisites[2] or an onboard diagnosis (OBD) system. The exhaust pipe control is the standard method for evaluating the exhaust emissions. Based on an equivalence evaluation and taking the pertinent legislation in approval matters into account, the member States can authorise using the OBD system in compliance with the manufacturer's recommendations and other requisites. — For vehicles starting from Euro 6 and Euro VI[3] emission class: measurement with an exhaust gas analyser in compliance with the requisites[1] or reading the OBD system in compliance with the manufacturer's recommendations and other requisites.[2].	Gaseous emission levels if provided by manufacturer		See the averages calculated with deterioration factors: CO 454.1 mg/km THC 42.9 mg/km NMHC 36.0 mg/km NO_x 36.0 mg/km
		Specific information per vehicle (VIN) or engine code		Engine code 55253268
		To inspect the	Engine preconditioning requirements, such as. min. oil temp/water temp. [°C] and	The engine rotation scheme is at least maintained by the engine control

Item	Method	Necessary information		Available information
	Measurement not applicable to two-stroke engines.	exhaust pipe:	procedures for putting the engine into type II test mode	unit: measurement of the CO content in Type I test conditions
			Results of the type II emission test	
			CO with engine at idle [%]	0.00%
			CO at minimum acceleration [%]	0.01%
			Lambda []	1.016
		Using the OBD system:	Connector and communication protocol (standard, power voltage, position)	Standard and power voltage: data gathering in progress *Position on* **eLEARN:** Model 348-124 Spider; 1.4 Turbo Multiair; Electrical system; 1 – Electrical functions; E80 – Multiple diagnosis connector; E8010 – Multiple diagnosis connector; Component location; R010
			List of DTC (classes A, B1 and B2 presently only for heavy vehicles)	N/A

8.2.2. Compression ignition engine emissions

Item	Method	Necessary information		Available information
8.2.2.1. Exhaust emission control equipment	Visual inspection.	Overall description of the exhaust emission control system. For example DeNOx system [Yes/No] Anti-particulate filter installed [Yes/No]		N/A
		EGR position		N/A
		Specific information [vehicle (VIN)] per engine type		N/A
8.2.2.2. Opacity These requirements do not apply to vehicles registered or put into circulation before 1 January 1980	— For vehicles up to Euro 5 and Euro V[2] emission class: exhaust gas opacity measurement in free acceleration (idling, from idle to maximum speed) with gear in neutral and clutch engaged or from the OBD system reading. The exhaust pipe control is the standard method for evaluating the exhaust emissions. Based on an equivalence evaluation, the member States can authorise using the OBD system in compliance with the manufacturer's recommendations and other requisites.	Information specific to the vehicle engine type (VIN)		N/A
		To inspect the exhaust pipe:	Engine preconditioning requirements, such as. min. oil temp/water temp. [°C] and procedures for putting the engine into type II test mode	N/A

Item	Method	Necessary information		Available information
	— For vehicles starting from Euro 6 and Euro VI[3] emission class: exhaust gas opacity measurement in free acceleration (idling, from idle to maximum speed) with gear in neutral and clutch engaged or from the OBD system reading, in compliance with the manufacturer's recommendations and other requisites[2]. Vehicle preconditions: 1. the vehicles can be inspected without preconditioning, but for safety reasons, the engine must be both hot and in a satisfactory mechanical condition. 2. Requirements in preconditioning matters: i) the engine must have reached operating temperature, for example, the engine oil temperature, taken with a probe in the oil dipstick housing, must be at least 80°C, or in correspondence to the normal operating temperature if it is lower, or still at the engine block temperature, measured by the level of infrared radiation, it must be at least the same. If this type of measurement is not possible because of the vehicle configuration, the normal engine operating temperature can be obtained in another way, for example by activating the engine cooling fan; ii) the exhaust system must be bled during at least three free acceleration cycles or with an equivalent method. Test procedure: 1. the engine, any turbochargers, must be at least at minimum before starting every free acceleration cycle. In the case of heavy, diesel engine vehicles, that implicates an interval of at least ten seconds after releasing the accelerator; 2. to start each free acceleration cycle, the accelerator pedal must be pressed to the floor, fast and regularly (meaning in less than one second), but not abruptly, so you get the maximum distribution of the injection pump; 3. during each free acceleration cycle, before releasing the accelerator control, the engine must have reached the speed specified by the manufacturer or, for automatic vehicles, the speed specified by the manufacturer or, if that information is not available, two thirds of the maximum speed. That can be verified, for example, by checking the engine speed or letting enough time to elapse between pressing down on and releasing the accelerator; for category M_2, M_3, N_2 and N_3 vehicles, this interval has to be at least two seconds; 4. vehicles fail the test only if the arithmetic values of the recorded values in at least the last three free acceleration cycles exceeds the limit value. This can be calculated ignoring the values that deviate significantly from the average recorded or by using the results of any other statistical calculation that takes		K value recorded on the manufacturer's plate affixed to the vehicle (result of the type II emission test)	N/A
			Maximum engine speed in type II tests	N/A
			Engine speed limiter for empty acceleration [Yes/No]	N/A
			Description for deactivating the engine speed limiter to run a test in free acceleration	N/A
		Using the OBD system:	Authorised DTC with OBD scanning {codes for the NOx 3000 group for light vehicles}	N/A
			Connector and communication protocol (standard, power voltage, position)	N/A
			List of DTC (classes A, B1 and B2 presently only for heavy vehicles)	N/A

Item	Method	Necessary information		Available information
	the dispersion of the measurements into account. The member States can limit the number of test cycles; 5. to avoid pointless tests, the member States can consider that a vehicle has failed the test if the recorded values are considerably higher than the limit values after at least three free acceleration cycles or after the bleeding cycles. Still to avoid pointless tests, the member States can consider that a vehicle has passed the test if the recorded values are considerably lower than the limit values after at least three free acceleration cycles or after the bleeding cycles.			

[1] The (X) sign indicates components relating to the vehicle status and to its suitability for road use not considered essential for technical inspections.
[2] Approved in compliance with 70/220/EEC directive, annex I, table 1 (Euro 5), of (EC) no. 715/2007 regulation, to the 88/77/EEC directive and to the 2005/55/EC directive.
[3] Approved in compliance with annex I, table 2 (Euro 6), of the (EC) regulation no. 715/2007 and with the (EC) regulation no. 595/2009 (Euro VI).