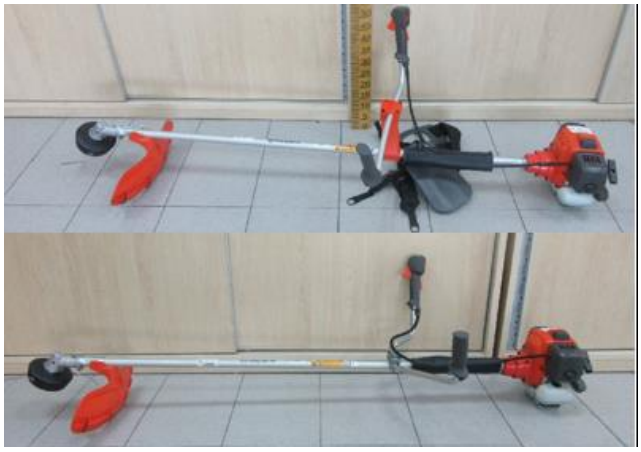
Prüfbericht-Nr.: *Test report no.:*	**50098675 005**	**Auftrags-Nr.:** *Order no.*:	244543651	Seite 1 von 32 *Page 1 of **32***
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2023-09-09	
Auftraggeber: *Client:*	Husqvarna AB SE-561 82 Huskvarna, Sweden			
Prüfgegenstand: *Test item:*	Brush Cutter/Grass Trimmer, powered by gasoline			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	541RS, 541RST			
Auftrags-Inhalt: *Order content*:	Standard updated			
Prüfgrundlage: *Test specification:*	EN ISO 11806-1:2022			

Wareneingangsdatum: *Date of sample receipt:*	2023-10-15
Prüfmuster-Nr.: *Test sample no:*	A003581780-005~008
Prüfzeitraum: *Testing period:*	2023-10-30 – 2023-11-06
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shanghai) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shanghai) Co., Ltd.
Prüfergebnis*: *Test result*:*	Pass



geprüft von: *tested by:*	X Victor Qiu Signed by: Victor Qiu	**genehmigt von:** *authorized by:*	X Dong Xu Signed by: Dong Xu
Datum: *Date:* 2023-12-08		**Ausstellungsdatum:** *Issue date:* 2023-12-08	
Stellung / *Position:*	Project Engineer	**Stellung** / *Position:*	Authorizer

Sonstiges / *Other:*
Client contact: Liying.Dai@husqvarnagroup.com
The report is based on report: 50098675 001-004. For details, see General Information on Page 2.

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

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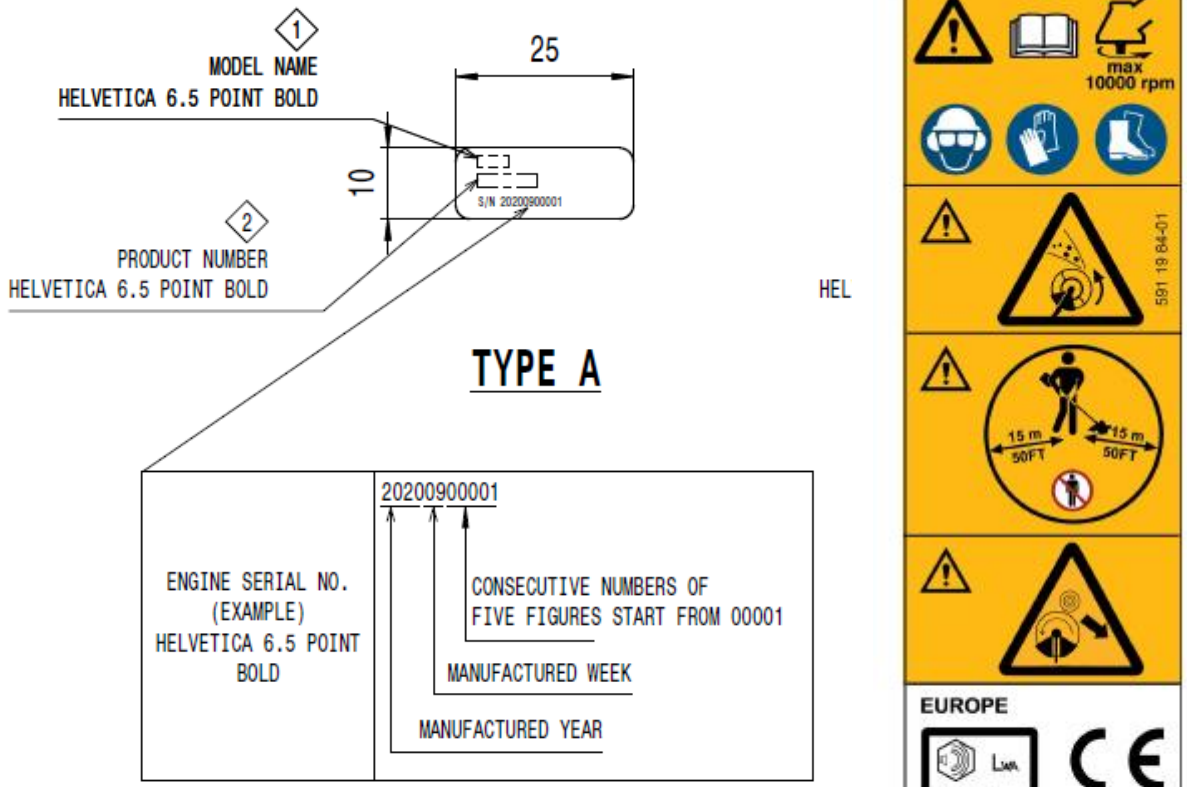
Copy of the marking plate :



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General information:

This product is a gasoline brush cutter and grass trimmer.

This report includes 2 models 541RS and 541RST. These two models are totally same except different handle. For details, see picture as below:

Picture of handle for 541RST

Picture of handle for 541RS

Construction check were carried out on all models and met the requirements of the harmonized standard. Manual and label were checked and met the requirements of the harmonized standard.

This report is based on 50098675 001-004 and for:

1. Standard updated from EN ISO 11806-1:2011 to EN ISO 11806-1:2022. Relevant tests have been carried out and passed.

2. Add alternative spark plug. For details, see Attachment 1. No additional test need to be performed.

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
4	**Safety requirements**		P
4.1	**General** Machines shall comply with the safety requirements and/or protective measures of this clause. In addition, the machine shall be designed according to the principles of ISO 12100 for relevant but not significant hazards which are not dealt with by this part of ISO 11806. The machine shall also be marked according to 5.2 and carry warnings according to 5.3		P
	The safe operation of a brush-cutter and a grass-trimmer depends on both the safety requirements given in this clause and the safe working conditions associated wit the use of adequate personal protection equipment (PPE), such as gloves, slip-resistant footwear, and leg, eye and hearing protection equipment, as well as safe working procedures (see 5.1)	Meet the requirement.	P
	The instruction handbook to be provided with the machine shall comply with 5.1		P
	If a grass-trimmer can be converted to a brush-cutter then the converted machine shall comply with the requirements for a brush-cutter and vice versa	Change the cutting attachment.	P
	The overall safety of the separate cutting attachment has to be verified as a part of the complete machine.		P
	Except where otherwise specified in this part of ISO 11806, the safety distance specified in ISO 13857:2019, 4.2.4.1 and 4.2.4.3 shall be met	Meet the requirement.	P
	If a special tool is required to replace a cutting attachment, it shall be supplied with the machine		P
4.2	**Handles**		P
4.2.1	Requirements		P
	The machine shall have a handle for each hand. These handles shall be designed such that:	Two handles are provided, one for each hand.	P
	- they can be fully gripped by an operator when wearing gloves		P
	- they provide the necessary sureness of grip by their shaping and surface		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	- they have a length of at least 100mm	Min. left handle: 104mm Min. right handle: 104mm.	P
	- the distance l (see picture 3) between the centre of the handles is at least 500mm for those machines which can be equipped with metal saw blades, and at least 250mm for all others	Min. 625mm for left and right handles	P
	- they are adjustable so that a suitable ergonomic working position can be achieved. An adjustment below the minimum distance l shall be prevented by design	Considered.	P
4.2.2	**Verification**		P
	The design, adjustment and dimensions shall be verified by inspection and measurements and function test		P
4.3	**Barrier and distance to cutting attachment for brush-cutters**		P
4.3.1	Requirements		P
	Brush-cutters shall be equipped with a barrier to prevent an unintentional contact with the cutting attachment during operation		P
	The barrier shall project at least 200mm horizontally and perpendicularly from the centre –line of the drive shaft tube. This function can also be performed by the handle assembly. See Figure 4.	The left handle is used as a barrier for models with left and right handle. Min. barrier length: 250mm.	P
	The minimum straight line distance from the rear of the barrier (2) at a width of 200mm (2) to the nearest unguarded point of the cutting attachment (1) shall be at least 830mm, where the unguarded point of the cutting attachment is the intersection between the plane perpendicular to the cutting path and the side-edge of the cutting-attachment guard. See Figure 4	The handle position is limited by position marking. When the handle is fixed on the closest to cutting attachment position, the distance is more than 950mm.	P
	Barriers that are to be removed as a part of maintenance procedure or assembled by the operator, described in the instruction handbook, shall be fixed by systems that can be opened or removed only with tools. The fixing system for barriers which are independent from the handle assembly shall be permanently attached to the barrier and /or the machine when the barrier is removed.		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
4.3.2	**Verification**		P
	The design, adjustment and dimensions shall be verified by inspection and measurements		P
4.4	**Harness**		P
4.4.1	Requirements		P
	A double shoulder harness shall be provided for all machines exceeding a dry weight of 7,5 kg and for all brush saws. The double shoulder harness shall be supplied with a hip pad.	The max. weight is 8kg. No brush saw is used.	N/A
	Brush-cutters other than brush saws have a dry weight of 7.5kg or less and grass-trimmers having a dry weight of 6kg to 7.5kg shall at least be provided with a single shoulder harness. For a grass-trimmer with a dry weight below 6kg, no harness is required.	Max. dry weight is 8kg. The double shoulder harness is used.	P
	The harness shall be adjustable to the size of the operator. Shoulder harnesses shall be:		P
	designed in a way for easy removal; or		N/A
	equipped with a quick release mechanism that ensures that the machine can be removed or released quickly from the operator.		P
	A single shoulder harness is considered to be designed in a way for easy removal.		N/A
	A double shoulder harness is considered to be designed in a way for easy removal, if the left and right shoulder straps are not connected to each other in front of the operator's body.		N/A
	If straps to connect the left and right shoulder straps are provided, the double shoulder harness is also considered to be designed in a way for easy removal when the straps connecting the left and right shoulder straps can be released under the load of the machine by using one hand and have no more than two release points. NOTE An example of a release point is a buckle that requires squeezing between the thumb and finger before releasing, such as a side release buckle.		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	A quick-release mechanism, if provided, shall be positioned either at the connection between the machine and the harness or between the harness and the operator. The quick-release mechanism shall only function by deliberate action of the operator.		P
	It shall be possible to open the quick-release mechanism while under load using only one hand and it shall have no more than two release points.		P
4.4.2	The type of harness, its functionality and its adjustment shall be verified by inspection. The quick- release mechanism(s) shall be verified by a functional test carried out by a person wearing the harness and with a vertical load of three times the dry weight of the machine acting on the suspension point.	Meet the requirement.	P
4.5	**Balance**		P
4.5.1	Requirements		P
4.5.1.1	All machines requiring a harness, except those described in 4.5.1.2, shall have the suspension point (see figure 3) adjustable so that the machine is balanced when it is suspended on this point	The suspension point that mounted on the shaft can be adjusted.	P
	Such a balanced machine, with the suspension point at a vertical distance of 775±25mm above the ground, shall have:	brush cutter: min. 800mm. grass trimmer: min. 750mm.	P
	- for brush-cutter: a distance from the ground to the nearest point of the blade 200mm±100mm	Min. 80m	P
	- for grass-trimmer: a distance from the ground to the nearest point of the cutting attachment of 150mm±150mm	Min. 20mm	P
	The requirements shall be met with tanks that are half filled and with all configurations of the machine according to the manufacturer's instructions.		P
4.5.1.2	Machines suspended with a harness, and designed to be supported by the ground shall have the suspension point adjustable so that the ground contact force is not greater than 20N, with tanks that are half filled and with all configurations of the machine according to the manufacturer's instructions.		P
4.5.2	**Verification**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	The requirements of 4.5.1 shall be verified by inspection and measurement using the lightest and heaviest recommended cutting attachments		P
4.6	**Cutting-attachment strength**		P
4.6.1	Requirements		P
	The cutting attachment, excluding flexible cutting lines, shall not break or crack when impacted once against a steel rod of diameter 25mm±1mm		P
	The same cutting attachment shall then, not break or crack when operated at an over-speed		P
	An exception from this second requirement is made for a single-piece metal blade. Such blades shall instead meet the material requirements in ISO 7113:1999, clause 5.		P
	These requirements are applicable to all recommended cutting attachments	Tested on the blade, no break or crack occurred.	P
4.6.2	**Verification**		P
	Impact strength shall be verified by a test according to Annex A. The final verification for cracks shall be done by visual inspection.	After impact and over-speed, no break and crack.	P
	Single-piece metal blades shall be verified by testing in accordance with ISO 7113:1999, clause 5.	After bend test, no crack.	P
4.7	**Cutting-attachment retention**		P
4.7.1	Metallic cutting shall be secured to prevent relative motion between the cutting attachment and the retainer, or between the metallic cutting attachment and the shaft on which it is mounted.		P
	The method for securing the metallic cutting attachment shall also prevent loosening of the cutting attachment during use.		P
	These requirements are applicable to all metallic cutting attachments recommended in the instruction handbook.		P
4.7.2	The method of attachment shall be verified by inspection and by using the following test procedure		P
	a) install the cutting attachment in accordance with the instruction handbook		P
	b) lock the power transmission shaft		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	c) apply to the cutting attachment a rotation torque, M in Newton metres (Nm) M=0.4×V×K Conduct the test five times in the direction opposite to normal rotation, then five times in the direction of normal operation.	0.4VK=0.4×41.3×1.40 =23.1Nm K=1.4 5 times in the normal direction and 5 times in the opposite direction.	P
4.8	**Cutting-attachment guards**		P
4.8.1	The guard dimensions shall comply with ISO 7918		P
	The guard location shall comply with ISO 7918, for all possible adjustments	Guard cannot adjustable. Meet the requirement.	P
	The guard strength shall comply with ISO 8380 for all guards, except for the test at -25°C which does not apply to the guard of grass-trimmer	Tested and OK.	P
	Guard dimensions shall comply with the specifications in ISO 7918 before and after the tests specified in 4.8.2	Checked. Meet the requirement.	P
	In a thrown-objects test in accordance with Annex B, no more than three penetrations in the target zone in height are allowed. If more than three penetrations occur, the test has to be repeated five times with no more than three penetrations in each of these tests. No cracks or breakage of the guards are allowed.		P
	Guards that are to be removed in connection with a change of cutting attachment or as part of maintenance procedures, described un the instruction handbook, shall be fixed by systems that can be opened or removed only with tools. These guards-fixing systems shall remain attached to the guards or to the machinery when the guards are removed.		P
4.8.2	**Verification**		P
	Guard dimensions, fixing system and locations shall be verified by inspection and measurements. Strength requirements shall be verified by testing in accordance with ISO 8380. The thrown-objects requirement shall be verified by testing in accordance with Annex B		P
4.9	**Transport cover**		P
4.9.1	**Requirements**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Machines with a metallic cutting attachment shall be provided with a transport cover, which shall be so designed that it remains attached to the cutting-attachment during transport and storage	Meet the requirement.	P
4.9.2	**Verification**		P
	The attachment of the transport cover to the cutting attachment shall be verified by inspection when holding the machine in any direction		P
4.10	**Length of flexible cutting lines**		P
4.10.1	**Requirements**		P
	Grass-trimmer with flexible cutting lines shall have a line-limiting device or other means of line-strength control. The limiting device shall cut the flexible cutting line to lengths compatible with the cutting-attachment guard	A line-limiting device is used on both types.	P
4.10.2	**Verification**		P
	The means to limit or control the line length shall be verified by a functional test and inspection		P
4.11	**Engine starting device**		P
4.11.1	**Requirements**		P
	The engine starting device shall be a self-contained , battery – operated electric starter and/or a manual starter where the actuator is permanently attached to the machine	A manual starter is used.	P
	Machines with a manual starter shall have a recoil device for the rope		P
	Two or more separate and dissimilar actions shall be required to activate the electrical starting device	No electrical starting device is used.	N/A
4.11.2	**Verification**		P
	The means of starting the engine shall be verified by inspection and functional testing		P
4.12	**Engine stopping device**		P
4.12.1	**Requirements**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	The machine shall be fitted with an engine stopping device by means of which the engine can be brought to a final stop and which does not depend on sustained manual effort for it operation. The control for this device shall be positioned that it can be operated while the machine is held with both hands by an operator wearing gloves. The color of the control shall clearly contrast with the background	The color of the control is red. The background around the control is black.	P
4.12.2	**Verification**		P
	The correct functioning of the engine stopping device shall be verified by inspection while the machine is being operated. The location of the control shall also be verified by inspection		P
4.13	**Throttle control**		P
4.13.1	**Position**		P
4.13.1.1	**Requirements**		P
	The throttle trigger shall be positioned so that it can be pressed and released with a gloved hand while holding the handle to which the throttle trigger is mounted	Meet the requirement.	P
4.13.1.2	**Verification**		P
	The position shall be verified by inspection and functional testing		P
4.13.2	**Operation**		P
4.13.2.1	**Requirements**		P
	The machines shall be provided with a throttle trigger that, when released, automatically reverts to the idling position. The throttle trigger, except for grass-trimmers with a cutting attachment where each filament or pivoting non-metallic blade has a kinetic energy of less than 10J, shall be retained in the idling position by the automatic engagement of a throttle trigger lock-out	The throttle trigger lock-out is used. The user must depress the throttle trigger to make the appliance work at racing speed after disengage the throttle trigger lock-out and revert to the idling position when the throttle trigger released.	P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	For brush-cutters and grass-trimmers with a cutting attachment where each filament or pivoting non-metallic blade has a kinetic energy of 10J or more, after the starting procedure has been finished, activation of the throttle trigger to increase the engine speed, to a point where the cutting attachment starts to move, shall only be possible after the throttle trigger lock-out has been disengaged.	Meet the requirement.	P
	The starting procedure is finished when the operator disengages the throttle lock and the engine returns to idling speed		N/A
	Except for grass-trimmer with a cutting attachment, where each filament or pivoting non-metallic blade has a kinetic energy of less than 10J, unintentional movement of the cutting attachment shall be minimized by a throttle control linkage so designed that a force applied to the handle, with the throttle trigger lock-out engaged, will not increase the engine speed to a point where the clutch engages and cutting cutting- attachment movement begins. When a force is applied to the throttle trigger, while the throttle trigger lockout is engaged, engine speed shall not increase to a point where the clutch engages and cutting attachment movement begins.	Meet the requirement.	P
	For the calculation of kinetic energy, see 4.13.2.2		P
4.13.2.2	**Calculation of kinetic energy of filament and pivoting non-metallic blades**		P
	For the purpose of this part of ISO 11806 the kinetic energy is in joules, of filament and pivoting non-metallic blades shall be calculated by means of the equation	E_k: 6.1J<10J.	P
4.13.2.3	**Verification**		P
	The function shall be verified by inspection while operating the machine. The throttle-control linkage design shall be verified by applying a force in the most unfavorable direction on the handle with the throttle control, equal to three times the dry weight of the machine		N/A

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	The throttle trigger lock-out function shall be verified by applying a force (F) equal to (50 ± 2) N or the dry weight of the machine, whichever is higher, on the throttle trigger with the throttle trigger lock-out engaged. During the test, the handle shall be fixed, without contacting the throttle trigger lock-out. The force (F) shall be applied gradually to the throttle trigger in the direction of travel and held for (5 ± 1) s. For pivoting throttle triggers, the force shall be applied at the point furthest from the pivot, and for linear operating throttle triggers, the force shall be applied at the midpoint of the throttle trigger. See Figures 5 a) and 5 b).		P
4.13.3	**Throttle lock**		P
4.13.3.1	**Requirements**		P
	If a throttle lock is provided to aid starting and its engagement will result in a movement of the cutting attachment during starting, it shall be such that the throttle lock has to be engaged manually and shall be automatically released when the throttle trigger is operated. In these cases, the activation device for setting the throttle lock shall be located outside the gripping area of the handle and require at least two independent motions to engage the throttle lock		P
	For finger-type throttle control, the gripping area is defined as extending from 25mm in front of the rear part of the throttle trigger to 75mm behind the rear part of the throttle trigger	Outside of gripping area.	P
	For thumb-type throttle control, the gripping area is defined as the distance from the rear part of the throttle trigger to the rearmost part of the handle		P
	The operational force on the throttle trigger for releasing the throttle lock shall not exceed 25N.	Measured: 20N.	P
4.13.3.2	**Verification**		P
	The function of the throttle lock shall be verified by inspection and measurements while operating the machine. The force to release the throttle lock shall be applied within 1s at a position (5±1)mm in front of the rear part of the throttle trigger and in the direction of the trigger movement (perpendicular to the rotation radius of the trigger)		P
4.14	**Clutch**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
4.14.1	**Requirements**		P
	All machines to which a blade can be attached shall have a clutch so designed that the cutting attachment does not move when the engine rotates at any speed less than 1.25times the idling speed		P
4.14.2	**Verification**		P
	Correct operation of the clutch shall be verified by inspection when increasing the engine speed from idling speed to 1.25times the highest idling speed specified in the instruction handbook	Recommend max. idle speed: 2500min^{-1}. clutch engaged speed: 3350min^{-1} >1.25x2500min^{-1}	P
4.15	**Tanks**		P
4.15.1	**General**		P
4.15.1.1	**Requirements**		P
	Fuel tank caps shall have retainers	A retainer is provided.	P
	The fuel tank opening shall at least 20mm in diameter and the oil tank opening, if existent, at least 15mm in diameter. Each opening or cap shall be clearly marked to indicate the function of the tank, and if only the caps are marked, they shall not be interchangeable between tanks	Fuel tank opening is 31mm, no oil tank.	P
	The design of the fuel tank assembly shall be such that no leakage occurs while the machine is at its normal stable operating temperature, in all working positions and while being transported.		P
	The filler openings shall be located so that the action of filling the tanks is not obstructed by other components. It shall be possible to use a funnel.		P
4.15.1.2	**Verification**		P
	Cap retainers, opening dimensions and location shall be verified by measurement and inspection. Caps and fuel tank ventilation system performance shall be verified as follows.		P
	Conduct the test without the influence of sunlight, with an ambient air speed of max. 3 m/s and at (20 ± 3) °C ambient temperature.		P
	Fill the tank to the manufacturer's recommended fill level. Secure cap per the manufacturer's recommendations.		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Prepare the machine for testing by cycling the engine for 5 s at idling speed and 5 s at racing speed, until the surface temperature stabilizes within 5 °C. Once the surface temperature has stabilized, shutdown the machine.		P
	Immediately following the shutdown, inspect the caps and fuel tank ventilation system for leakage while holding the machine for 30 s in each of the six orthogonal directions.		P
4.15.2	**Fuel tank structural integrity**		P
4.15.2.1	**Requirements**		P
	No visible tank leakage shall occur after testing the machine according to Annex D. Seepage from the fuel tank ventilation system is not regarded as leakage.		P
4.15.2.2	**Verification**		P
	Inspect the machine for leakage while holding the machine for 30 s in each of the six orthogonal directions after testing the machine according to Annex D.		P
4.15.3	**Fuel feed line strength and accessibility**		P
4.15.3.1	**Requirements**		P
	No fuel feed lines shall become damaged, detached or leak after testing the machine according to Annex E.		P
4.15.3.2	**Verification**		P
	Verification is by visual inspection.		P
4.16	**Protection against contact with parts under high voltage**		P
4.16.1	**Requirements**		P
	All high-voltage parts of the circuit, including spark-plug terminals, shall be located, insulated or guarded so that the operator cannot make accidental contact with them		P
	Ignition interruption or short-circuiting shall be provided and shall be fitted on the low-voltage side		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
4.16.2	**Verification**		P
	The location and insulation of the parts under high voltage shall be verified by inspection, using a standard test finger, in according with IEC 60745-1:2006, Figure 1. The ignition interruption or short-circuiting shall be verified by inspection		P
4.17	**Protection against contact with hot parts**		P
4.17.1	**Requirements**		P
	The cylinder and parts in direct contact with the cylinder or the muffler shall be protected against unintentional contact during normal operation of the machine		P
	Such hot surfaces shall be considered accessible if the contactable area exceeds 10cm^2 when probed by the test cone as shown in Figure 5		P
	The temperature for the accessible parts of the machine defined above, including guards or shields provided to prevent access to such hot surfaces, shall not be more than 80°C for metallic surfaces or 94°C for plastic surface	Measured the temperature value: Max. plastic surface 60.5°C Ambient temperature: 20.6°C.	P
4.17.2	**Verification**		P
	Verification shall be by determining the accessibility of identified hot surfaces using the test cone shown in Fig.5 and as follows		P
	Conduct the temperature test in the shade and with a maximum wind speed of 3 m/s. Operate the engine by cycling for 5s at idling speed and 5s at racing speed until the surface temperature stabilize.		P
	Identify the hot surface area or areas. Determine temperatures using temperature-measuring equipment with an accuracy of ±2°C.		P
	If the test is conducted at an ambient temperature outside of the nominal 20°C±3C, the recorded temperatures shall be corrected using the formula $T_C=T_O-T_A+20°C$		P
	Allow the power source to cool before using the cone. It is not necessary to test the accessibility of hot parts while they are hot		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Apply the test cone shown in Figure 5 in any direction and with a maximum force of 10N, when moving the cone, determine whether there is any contact between the hot surface area or areas and the cone's tip or the conical surface. Neither tip nor conical surface shall come into contact with any hot surface area greater than 10cm^2	Hot surface area which is less than 10 cm^2 is neglected.	P
4.18	**Exhaust gases**		P
4.18.1	**Requirements**		P
	The exhaust outlet shall be located such that it directs exhaust emissions away from the operator's face in normal working positions.		P
4.18.1	**Verification**		P
	The location and direction of the exhaust outlet shall be verified by inspection		P
4.19	**Vibration**		P
4.19.1	**Reduction by design at source and by protective measures**		P
	Vibration reduction shall be integral part of the design process thus specifically taking into account measures at source. The success of the applied vibration measures is assessed on the basis of the actual vibration total values for each handle. The main sources causing and influencing vibration are generally the dynamic forces from engine, cutting means, unbalanced moving parts, impact in gear sprockets, bearings and other mechanisms, and the interaction between operator, machine and material being worked.		P
4.19.2	**Vibration measurement**		P
	The vibration shall be measured and the equivalent vibration total value shall be calculated for each handle in accordance with ISO 22867:2021	For 541RST: Grass trimmer: 5.6 / 5.1 m/s^2 Brush cutter: 7.1 / 6.31 m/s^2 For 541RS: Grass trimmer: 3.1 / 2.8 m/s^2 Brush cutter: 4.5 / 5.0 m/s^2 K=1.5m/s^2.	P
4.20	**Noise**		P
4.20.1	**Reduction by design at source and by protective measures**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Noise reduction shall be an integral part of the design process thus specially taking into account at source the success of the applied noise reduction measures is assessed on the basis of the actual noise emission values. The main sources causing and influencing noise are the air intake system, engine cooling system. Engine exhaust system, cutting system and vibrating surfaces.		P
	ISO/TR 11688-1 gives general technical information and guidance for the design of low-noise machines. Special care shall be taken in the acoustical design of brush-cutters and grass-trimmers		P
4.20.2	**Noise measurement**		P
	The equipment A-weight emission sound pressure level at the operator's position and A-weighted sound power level shall be measured and calculated in accordance with ISO 22868:2021	For grass trimmer: Sound pressure level:94 dB(A), K=3 dB(A), measured sound power level 104 dB(A), K=3 dB(A), For brush cutter: Sound pressure level:95 dB(A) K=3 dB(A), Measured sound power level:105 dB(A), K=3 dB(A), Guaranteed sound power level is 109dB(A) for all models.	P
4.21	**Electromagnetic immunity**		N/A
4.21.1	**Requirements**		N/A
	All electronic components of the systems used to control the machine shall meet the acceptance criteria given in ISO 14982:1998, 6.3 and 6.6, concerning the electromagnetic immunity of the machine		N/A
4.21.2	**Verification**		N/A
	Electromagnetic immunity shall be verified by testing in accordance with ISO 14982:1998		N/A
5	**Information for use**		P
5.1	**Instruction handbook**		P
5.1.1	**General**		P
	For the information to be provided to the user, the following applies, together with ISO 12100:2010,6.4		P
5.1.2	**Technical data**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	The instruction handbook shall give at least the following information for each model and/or shall mark where significant differences occur:		P
	- machine mass (with empty tanks, without cutting attachment, cutting attachment guard and harness), in kg		P
	- cutting attachments (type, diameter for blades), in mm	4 teeth Metal blade, cutting width:Φ275mm; 3 teeth Metal blade, cutting width:Φ255mm; 2 teeth Metal blade, cutting width:Φ330mm; Nylon rope, cutting width: Φ450mm Plastic blade, cutting width: Φ300mm;	P
	- maximum rotational frequency of the spindle, in min^{-1}	12000	P
	- engine idling speed range, in min^{-1}	2500±200	P
	- values for equivalent vibration total value (for each handle), determined in accordance with ISO 22867:2021, together with uncertainty of stated values, both in m/s^2	For 541RST: Grass trimmer: 5.6 / 5.1 m/s^2 Brush cutter: 7.1 / 6.31 m/s^2 For 541RS: Grass trimmer: 3.1 / 2.8 m/s^2 Brush cutter: 4.5 / 5.0 m/s^2	P
	- values for the equivalent A-weighted emission sound pressure level at the operator position, determined in accordance with ISO 22868:2021, together with the uncertainty of the stated values, both in dB	For grass trimmer: 94 dB(A), K=3 For brush cutter: 95 dB(A) K=3	P
	- values for the equivalent A-weighted sound power level, determined in accordance with ISO 22868:2021 (if required), together with the uncertainty of the stated values, both in dB	For grass trimmer: 104 dB(A), K=3 For brush cutter: 105 dB(A), K=3	P
5.1.3	**Other information**		P
	The instruction handbook shall contain, in accordance with ISO 12100:2010,6.4.5, comprehensive instruction and information on all aspects of operator./ user maintenance, safe use of the machine, including type and use of PPE and the need for training in all operations. The instructions shall take into account the use of the machine by a first-time and/or inexperienced operator.	Meet the requirement of the standard.	P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Extensive use should be made of pictograms and/or diagrams		P
	The importance of reading the instruction handbook thoroughly before using the machine shall be stressed the front page of the instruction handbook		P
	The terms used in all documentation shall be in accordance with ISO 7112:2018		P
	The instruction handbook shall at least cover information relating to the following:	Mentioned in the manual	P
	a) transport, handling and storage of the machine, including:		P
	- instructions for securing the machine during transport to prevent loss of fuel, damage or injury		P
	- cleaning and maintenance before storage, including the use of guards on cutting attachments with metal blades, and		P
	- use of a transport cover for metal blades during transport and storage		P
	b) commissioning of the machine, including:		P
	- assembling instructions, initial adjustments and checks		P
	- for machine with a clutch, routines for checking that the cutting attachment stops turning when the engine idles		P
	- a list of recommended cutting attachments and appropriate guards and their location, including a warning of possible consequences from using other cutting attachments, e.g. metal multi-piece pivoting chains and flail blades;		P
	- information regarding regular maintenance, pre-operating procedures and daily maintenance routines as well as the consequences of improper maintenance, and		P
	- filling of fuel and oil, especially concerning fire precautions		P
	c) the machine itself, including		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	- description, identification and nomenclature of principal parts including the safety devices and harness and the use of the quick-release mechanism (when provided), explanations of their functions and necessary PPE to be used, including correct clothing;		P
	- an explanation of symbols and safety signs		P
	- regular maintenance task, pre-operating measures and daily maintenance techniques, including checking for loose fasteners, fuel leaks and damaged parts such as cracks in the cutting attachment;		P
	- application of the machine and how it is intended to be used, including prohibited uses. For brush cutters information shall also be given about the risks of kick-back and blade-thrust;		P
	- declared values of A-weight emission sound pressure level at the operator's position and of the A-weight sound power levels including a warning about the risks and measures to be taken to minimize those risk , and		P
	- equivalent vibration, including warning about the risks and measures to be taken to minimize those risk		P
	d) the use of the machine, including		P
	- a note altering the user to the fact that the national regulation can restrict the use of the machine		P
	- the need for daily inspection before use and after dropping or other impacts to identify any significant defects		P
	- instructions on general operation and common cutting tasks including warnings against unintended use		P
	- instructions on the use of PPE including recommendations for the appropriate type of hearing protection, eye protection and clothing		P
	- for brush-cutters , the clothing instructions shall include information to use slip-resistant foot protection, as well as protective clothing		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	- a warning against the use of the machine when the operator is tired, ill or under the influence of alcohol or other drugs		P
	- hazards which could be encountered while using the machine and how avoid them while performing typical tasks		P
	- warning of risks for bystanders and the need to keep them at lease 15m away from the machine during its operation		P
	- staring and stopping techniques, with particular reference to safety		P
	- a warning about the emission of exhaust gases		P
	- information on correct working posture, the need for rest periods and changing working positions, and		P
	- advice to keep firm footing and balance during operation, including the need to use the harness provided.		P
	e) maintenance instructions, including		P
	- a description of servicing and replacement tasks for the user, including the need to keep the machine in good working condition,		P
	- specifications of the spare parts to be used, when these affect the health and safety of operators, for these machines the cutting attachment and the cutting-attachment guard		P
	- drawings or diagrams to allow user maintenance and fault-finding, and		P
	- the provision of sufficient information to enable the user to maintain the safety system throughout the lift of the product and an evaluation of the consequences of improper maintenance, use of non-conformant replacement components, or the removal or modification of safety components		P
5.2	**Marking**		P
	All machine shall be marked with the following minimum information		P
	- business name and full address of the manufacturer or, where applicable, the authorized representative		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	The address may be simplified, provided the manufacturer (or , where applicable, his authorized representative) can be identified, but in any event the address on the plaque shall be sufficient for mail to reach the company		P
	- designation of series or type		P
	Allowing the technical identification of the product. This may be achieved by a combination of letters and/or numbers and may be combined with the designation of the machinery.		P
	- designation of machinery		P
	The designation of machinery is to allow the technical identification of the product and this can be achieved by a combination of letters and/or numbers and can be combined with the designation of series or type.		P
	- year of construction, i.e. the year in which the manufacturing process was completed;		P
	- serial number, if any;		N/A
	- the maximum rotational frequency of the spindle		P
	- the rotation direction for the cutting attachment on a component near the cutting attachment , when applicable	Marked on guard	P
	In addition, the cutting attachment shall marked with the following information		P
	- maximum rated rotational frequency		P
	- rotation direction, when applicable	The user can easily recognize whether the blade is counter-fitted without any hazards.	N/A
	- name or trade mark of the manufacturer		P
	The machine shall also bear the following information		P
	- identification and method of operation, preferably according to ISO 3767-5, of the controls for engine starting and stopping devices, choke control, primer and heated handle switch (if provided)		P
	- identification of carburetor and oil adjustments (if provided)		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	- identification of fuel and oil tank (if provided) openings and /or cap		P
	If symbols are used, they shall be explained in the instruction handbook, and except if cast, embossed or stamped, shall be in contrast to their background. Embossed features shall at least 3.0 mm in height above the surrounding surface. The information and /or instruction provided by the symbols shall be clearly legible when viewed from a distance of not less than 500mm		P
	The markings shall be located inn a readily visible position and shall resist the anticipated service conditions, e.g. the effects of temperature, moisture, petrol, oil, abrasion and weathering exposure.		P
	If labels are used, they shall be tested in accordance with 5.4.2, after which they shall undergo a visual inspection and be compared against an untested, new control specimen. No significant indications of indentation, separation, splitting, chalking, swelling , peeling, blistering, flaking, large scratches or cracking of the material, and/or no significant deterioration of point, shall be detected.	Checked and ok.	P
	The labels shall also be tested in accordance with 5.4.3, after which non-adhesion distance shall be a maximum of 1mm from the specimen edge and the adhesive properties shall be at least 0.09w, in newtons , wherer w is the test specimen width, in mm	Checked and ok.	P
	NOTE:Labels tested and approved according to ANSI/UL 969:2018, supplemented by the gasoline, exposure test can be used and considered to fulfil the requirement of 5.4.		N/A
5.3	**Warnings**		P
	All machines shall be marked with the following warnings using text or pictograms:		P
	- Read the instruction handbook and follow all warnings and safety instructions		P
	- wear eye and hearing protection		P
	- wear head protection, where there is a risk of falling objects		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	- for brush-cutter, wear slip-resistant footwear and gloves		P
	- the distance between the machine and bystanders shall be at least 15m		P
	- do not use metal blades (If applicable)		P
	- beware of thrown objects		P
	- beware of blade thrust (on brush-cutter)		P
	If pictorials are used, they shall be explained in instruction handbook		P
	When pictorials are used, they shall, except if they are cast, embossed or stamped, be in contrast to their background. Embossed features shall be at least 0.3mm in height above the surrounding surface. The information and/or instructions provided by the symbols shall be clearly legible when viewed from a distance of not less then 500mm		P
	The warnings shall be located in a readily visible position on the machine and shall resist the anticipated service conditions, e.g. the effects of temperature, moisture, petrol, oil, abrasion and weathering exposure		P
	If labels are used, they shall be tested in accordance with 5.4.3, after which they shall undergo a visual inspection and be compared against an untested, new control specimen. No significant indications of indentation, separation, splitting, chalking, swelling , peeling, blistering, flaking, large scratches or cracking of the material, and/or no significant deterioration of point, shall be detected.	Checked and ok.	P
	The labels shall also be tested in accordance with 5.4.3, after which non-adhesion distance shall be a maximum of 1mm from the specimen edge and the adhesive properties shall be at least 0.09w, in newtons , wherer w is the test specimen width, in mm	Checked and ok.	P
	NOTE:Labels tested and approved according to ANSI/UL 969:2018, supplemented by the gasoline, exposure test can be used and considered to fulfil the requirement of 5.4.		N/A
5.4	**Tests of labels**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
5.4.1	**Preparation of test specimens and control specimens**		P
5.4.1	**General**		P
	New test specimens shall be prepard for each of the test given 5.4.2 and 5.4.3. New control specimens shall also be prepared for any test that involves a visual inspection		P
5.4.1.2	**Test panels**		P
	Test panels shall be made with a surface equal to that on which the sign shall be mounted		P
	The test panels shall be carefully cleaned with an appropriate solvent, in order to remove all traces of adhesive grease, oil and water, and then dried for at least 2h		P
5.4.1.3	**Test specimens**		P
	The number of test specimens and control specimens prepared for each test shall be a minimum of three		P
	The test specimen/control specimen shall be the complete sign, wherever possible, except where the physical limitations of the test equipment do not allow for testing of an entire sign or when the graphical content of the sign has no effect on the results of the test. The minimum dimensions of the test specimen shall be 13mm width and 25mm length		P
	The protective layer shall be completely removed for the wipe resistance test and for the adhesiontest to a length of at least 15mm but leaving the protected end long enough to be attache3d to the pulling machine. The specimens shall then be applied to the test panel symmetrically. The applied specimens shall be rolled over five times using a steel roller with a rubber coating, having a width at least 2mm wider than the test specimen, and a diameter of 30mm to 60mm; the roller shall be applied with a force of (50±2)N and a rolling speed of approximately (200±20)mm/s shall be maintained.		P
	After being applied to the test panels, the test specimens shall be conditioned at a temperature of 23°C±5°C with a relative humidity of 50%±20% for at least 24h, prior to testing		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
5.4.2	**Wipe resistance test**		P
	Three test specimens shall be mounted on test panels in accordance with 5.4.1, and then immersed in the test liquid for 300s±3s		P
	After being removed from the test liquid, wipe the test specimen with a force of 10±1N and 1 cycle/s, using an unbleached cotton cloth soaked in the test liquid for 30s±3s. After the wiping test has been completed, a visual inspection of the test specimen shall be carried out.		P
	The test liquids shall be		P
	a) water, and		P
	b) a mixture of (by volume) 50% isooctane and 50% toluene		P
5.4.3	**Adhesion test**		P
	Three test specimens shall be mounted on test panels in accordance with 5.4.1 and immersed in the test liquid (50% isooctane and 50% toluene) for 30min±1min		P
	After removing the test specimen form the test liquid, inspect and measure any non-adhesion distance from the specimen edge		P
	Then, attach the test panel to a holder and the free end of the test specimens, still covered by a protective layer, to a pulling machine. Apply a pulling force upwards at an angle of 90° to the test panel and at a speed of (60±6) mm/min. Measure the tensile force required for this cover a distance of at least 15mm. the average value of the tensile force, expressed in newtons, shall be calculated and recorded. If the test distance of 15mm is not achievable because the test specimens tear, the test specimens shall be reinforced with a second layer of label being tested.	Width of label is 30mm. The measured fore is more than 4.0N>2.7N (30 mm×0.09=2.7N)	P
	Annex A (normative) **Cutting attachment impact test**		P
A.1	The machine shall be suspended freely in an operating position (see figure A.1).		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
A.2	The test shall be conducted with a rotational cutting attachment speed corresponding to engine racing speed. For grass trimmers the rotational cutting attachment speed shall be determined with the line set to the manufacturer's maximum recommended length.		P
	The impact test shall be conducted with one swing against a (25 ± 1) mm diameter steel rod of designation 9S20 in accordance with ISO 683-4:2016, Table 2. The steel rod shall be impacted horizontally by the cutting attachment at an approach speed (v) of (1 ± 0,1) ms^{-1}, as shown in Figure A.1.		P
	For the impact test of flexible non-metallic line cutting attachments, the line shall be set at a length of (51 ± 13) mm from where the line exits the cutting attachment, and any supply reels shall be filled to the manufacturer’s recommended maximum capacity.		P
A.3	The engine shall be switched off immediately after the impact.		P
A.4	After the impact test of A.2, the line length of flexible cutting means using flexible lines, shall be set at (25 ± 12) mm extending from the cutting attachment and no other modifications shall be made to the cutting attachment. The cutting attachment shall then be spun for 5 min at 1,33 times the speed used in A.2. The attachment assembly shall be fastened to the test apparatus in the same manner as it would be on the machine.		P
	NOTE Single-piece solid steel blades are exempt from the spin test		--
	If the blade rotates in the opposite direction, the cutting attachment shall impact the steel rod from the other side.		N/A
	Annex B (normative) **Thrown objects test**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
B.1	**Test stand**		P
B.1.1	The test shall be conducted on a test stand as shown in figure B.1 and figure B.2.		P
B.1.2	The base shall be a flat board.		P
B.1.3	The base shall be covered with artificial grass-mat with a maximum height of 15 mm and a fibre length of 6mm to 8mm.		P
B.1.4	The fibre shall not have any specific orientation.		P
B. 2	**Test conditions**		P
B.2.1	The machine shall be mounted rigidly above the base, and oriented in such a way that the device which inserts the test pieces is at a distance *(1)* which is half the depth of the cutting teeth or 13 mm inside the outer path line of the cutting attachment, whichever is less (see figures B.1 and B.2). The flexible lines of the grass trimmer shall be adjusted to their maximum length.		P
B.2.2	The insertion of the test probes shall be made in a vertical direction from below, at one of two positions shown in figure B.2, as follows:		P
	- if the cutting attachment rotates counter-clockwise, position A shall be used, and		P
	- if the cutting attachment rotates clockwise, position B shall be sued		P
B.2.3	The lower surface of the cutting elements shall be parallel to and 30 mm ± 3 mm above the top of the fibre surface (see figure B.2). In cases where the cutting head (see figure B.2) extends more than 30mm below the cutting elements, a clearance of 1 mm to 5 mm between the cutting head and the fibre surface shall be maintained.		P
B.2.4	Adjust the velocity with which the test piece is inserted, so that the test piece raises a minimum of 20mm and a maximum of 30mm above the cutting element.		P
B.3	**Penetration wall**		P
B.3.1	At the operator's position, a wall with a minimum height of 2 000 mm above the top of the base shall be established.		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
B.3.2	The wall shall be made of kraft paper (weight per unit area 80 g/m^2).		P
B.3.3	The paper shall be flatly attached without folds on a framework whose minimum inside dimensions are shown in figure B.l.		P
B.4	**Test pieces**		P
B.4.1	The test pieces shall be ceramic prisms with triangular sides and a prism height of *6,5* mm ± 0,8 mm (see figure B.3). The mass of one prism shall be 0,4 g ± 0,02 g.		P
B.5	**Procedure**		P
B.5.1	At the selected test-piece insertion position (A or B), 25 test pieces shall be inserted vertically and individually from below, into the circular path of the rotating cutting attachment.		P
B.5.2	The engine speed shall be at wide open throttle, using carburettor settings according to the manufacturer's recommendation or 133 % of the maximum power speed, whichever is less.		P
B.5.3	The base of the test stand shall be cleaned after the insertion of five pieces.		P
B.6	**Inspection of the cutting attachment**		P
B.6.1	If the blade has been damaged during the test, it shall be replaced with a new blade		P
B.6.2	For grass trimmers with a damaged line, pull out a fresh piece of line and cut it off to the original length.		P
B.7	**Result**		P
	After test the paper wall shall be examined to determine if there has been any penetration.	Tested and ok.	P
	Penetration is confirmed if a ball of 5 mm diameter can be pressed through the tear with a force of 3 *N*.		P
	Annex C (informative) **List of significant hazards**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Annex D (normative) **Structural integrity of fuel tanks**		P
D.1	**General test conditions and requirements**		P
	Fill the machine's fuel tank, half full, with a mix of 50 % glycol and 50 % water. Condition the machine at (-5 ± 5) °C for a minimum of 6 h. Suspend the machine at the suspension height as described in D.2. Within one minute from coming out from the conditioning environment, drop the complete machine onto a concrete surface.		P
	Defective parts, excluding the fuel tank, may be replaced after each impact. A fuel tank does not include assembled components such as a fuel cap, fuel lines, gauges, grommets, seals, vents or valves.		P
	To collect any liquid that may leak out as a result of the test, concrete slabs placed in a metal tray, in turn placed on the concrete surface, can be used.		P
D.2	**Suspension heights**		P
	Suspend the machine complete with cutting attachment by means of a string attached to the mid-point of the rear handle or the harness suspension point in cases where such is provided.		P
	Normal suspension height: The lower part of the handle surface or the suspension point, whatever case is applicable, shall be (775 ± 5) mm above the hard impact surface with the machine in a normal position in accordance with Figure 1 and balanced to the nominal distances in accordance with 4.5. If the tank is exposed, the machine shall be suspended in such a manner so as to most likely cause the exposed tank surface to contact the ground at impact. It is not required that the tank contacts the ground at impact if the natural tendency of the machine design reorients the machine after release.		P
D.3	**Test procedure**		P

EN ISO 11806-1:2022			
Clause	Requirement - Test	Result - Remark	Verdict
	Equip the machine with the heaviest cutting attachment recommended for use according to the instructions. Drop the machine from the position and height as described in D.2. Two impacts shall be performed.		P
	Annex E (normative) **Procedures for the evaluation of the strength and accessibility of fuel feed lines**		P
	Fuel feed line strength and accessibility shall be determined by the use of a 7 mm diameter x 200 mm test probe, mounted to a force meter (see Figure E.1). All guards and covers shall be installed for the test and the test shall be conducted at room temperature. The fuel feed lines and connections shall be preconditioned by completely filling the fuel tank and then running the engine for 5 min. Stop the engine and wait 24 h prior to conducting the test.		P
	The fuel feed line and connections shall be tested by inserting the test probe into any openings in the machine that can be used to access the lines. Fuel feed lines accessible with the tip of the test probe shall be tested by applying an axial force of $(40^{\ 0}_{-2})$ N. Flexing of the probe is acceptable during the test.		P
	Inspect fuel feed lines for damage, detachment, or leaking. If the fuel feed lines remain intact after the probe test, briefly run the engine again and verify that no fuel leakage is observed.		P
	The probe shall be made of a PA6 nylon material without glass reinforcement. The probe represents branches in the working environment that might come into contact to the machine and possibly go into the openings of the machine.		P
	Annex ZA (informative) **Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC**		P

--- End of test report ---

TÜV Rheinland Group

Certificate No. AM 50609261 0001 **Our Reference** 01-QCL-50098675 005 **Appendix No.** N/A

Critical Component List

License holder	:	Husqvarna AB SE-561 82 Huskvarna, SWEDEN
Type of Appliance	:	Brush Cutter/Grass Trimmer, powered by gasoline
Type Designation	:	See Table A
Rating	:	See Table A
Protection Class	:	N/A
Supply connection	:	☐ fixed power cord
		☐ permanent connection
		☐ appliance inlet
		☐ direct plug in
		☐ battery operated

Please tick above box ☒ when applicable

Additional information :

Table A:

Model	Engine Power(kW)	Cylinder Capacity(cm^3)	Transmission shaft	Handle	Remarks
541RS	1.6	41.5	Single segment	Bicycle-type handle	Brush cutter and grass trimmer
541RST	1.6	41.5	Single segment	Bicycle-type handle	Brush cutter and grass trimmer

TÜV Rheinland Group

Certificate No. AM 50609261 0001 **Our Reference** 01-QCL-50098675 005 **Appendix No.** N/A

Critical Component List

Critical Components

Material: e.g. external enclosure, PCB, closed-end connector, sleeves, cord anchorage etc

Components with winding: e.g. motor, transformer, magnetic coil etc.

Other components: e.g. switch, thermostat, heater, plug, internal wire, capacitor, relay, varistor etc.

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
1.0 Engine	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	G45L	41.5cm^3, 1.6kW, Max. Engine speed:12000min^{-1}	EN ISO 11806-1	Tested with appliance
2.0 Spark plug	NGK	BPMR7A	0.6-0.7mm	EN ISO 11806-1	Tested with appliance
(alternative)	BRISK	HQT-1	0.6-0.7mm	EN ISO 11806-1	Tested with appliance
(alternative)	BRISK	HQT-1R	0.6-0.7mm	EN ISO 11806-1	Tested with appliance
3.0 Carburettor	Walbro	587106701	Rotary Valve	EN ISO 11806-1	Tested with appliance
4.0 Stop switch	Suffice International trade Co. Ltd.	503718201	--	EN ISO 11806-1	Tested with appliance
5.0 Ignition	Shandong Ikeda Denso Co. Ltd.	590577801	--	EN ISO 11806-1	Tested with appliance
6.0 2-teeth cutting blade	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	Multi 300-2	cutting width φ330mm, thickness 3mm,Max 9000 min^{-1}	EN ISO 11806-1	Tested with appliance
(alternative)	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	Multi 330-2	Cutting width Ø 330, metal blade, Max9000 min^{-1}	EN ISO 11806-1	Tested with appliance
7.0 3-teeth cutting blade	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	Multi 255-3	Cutting width Ø 255, metal blade, Max11000 min^{-1}	EN ISO 11806-1	Tested with appliance
8.0 4-teeth cutting blade	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	Grass 275-4	cutting width φ275mm, thickness2.5mm,Max11000 min^{-1}	EN ISO 11806-1	Tested with appliance
9.0 Plastic blades	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	Tricut Ø 300 mm	Cutting width Ø 300, Plastic blades Max10000 min^{-1}	EN ISO 11806-1	Tested with appliance

TÜV Rheinland Group

Certificate No. AM 50609261 0001 **Our Reference** 01-QCL-50098675 005 **Appendix No.** N/A

Critical Component List

Critical Components

Material: e.g. external enclosure, PCB, closed-end connector, sleeves, cord anchorage etc

Components with winding: e.g. motor, transformer, magnetic coil etc.

Other components: e.g. switch, thermostat, heater, plug, internal wire, capacitor, relay, varistor etc.

Object/part No.	Manufacturer/ trademark	Type/ model	Technical data	Standard	Mark(s) of conformity
10.0 Cutting line head	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	T45, T45x	Cutting width Ø 450mm，non-material filament line(Ø 3.0 mm cord), Max10500 min^{-1}	EN ISO 11806-1	Tested with appliance
(alternative)	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	T35, T35x;	Cutting width Ø 450mm，non-material filament line(Ø 2.7±0.3 mm cord), Max10000 min^{-1}	EN ISO 11806-1	Tested with appliance
(alternative)	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	S35	Cutting width Ø 450mm，non-material filament line(Ø 2.7±0.3 mm cord), Max10000 min^{-1}	EN ISO 11806-1	Tested with appliance
(alternative)	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	T55x	Cutting width Ø 450mm，non-material filament line(Ø 3.0±0.3 mm cord) Max10500 min^{-1}	EN ISO 11806-1	Tested with appliance
(alternative)	Husqvarna Zenoah Changzhou Machinery Co. Ltd.	S II	Cutting width Ø 450mm，non-material filament line(Ø3.0±0.3mm cord) Max10500 min^{-1}	EN ISO 11806-1	Tested with appliance
11.0 internal wire	Suzhou Industrial CLS Electronics Co. Ltd.	592756501	--	EN ISO 11806-1	Tested with appliance

Functional Components

Components which are required for performance purposes and not directly addressed by a component standard or product standard: Ripple capacitors, Mosfets, etc.

Object/part No.	Type/ model (optional)	Technical data