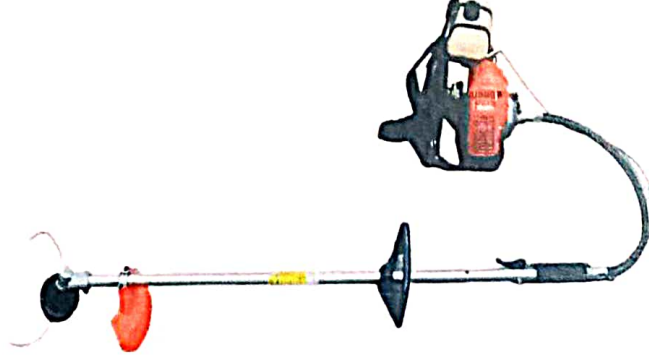


व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)  
COMMERCIAL TEST REPORT (Initial)



संख्या/No.: Machine 83/454  
माह / Month: January 2023

## INCOMPLETE REPORT



532RBS HUSQVARNA BRUSH CUTTER



भारत सरकार  
GOVT OF INDIA

कृषि एवं किसान कल्याण मंत्रालय

MINISTRY OF AGRICULTURE & FARMERS WELFARE

कृषि एवं किसान कल्याण विभाग

DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान  
NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE

विश्वनाथ चारिआलि, जिला- शोणितपुर (असम)

BISWANATH CHARIALI: SONITPUR: ASSAM, PIN - 784 176

[AN ISO 9001:2015 CERTIFIED INSTITUTION]

Ph. No. 03715-222094

Website: <http://nerfmtti.nic.in>

Fax No: 03715-230358

E-Mail: [fmti-ner@nic.in](mailto:fmti-ner@nic.in)

**1. SCOPE OF TEST****1.1 LABORATORY TEST**

- a) Checking of specifications
- b) Mechanical vibration measurement
- c) Noise measurement
- d) Wear assessment of critical components
- e) Engine performance test

**1.2 FIELD TEST**

- a) Rate of work
- b) Quality of work
- c) Labour requirement
- d) Adequacy of prime mover power
- e) Ease of operation, adjustment & safety provisions
- f) Defects, breakdowns and repairs

**2. METHOD OF SELECTION**

The test sample was selected by the testing authority through random selection. The following test samples were presented by the applicant during the random selection at Applicant's site.

Sl. No	Serial No. of test sample	Sl. No	Serial No. of test sample	Remarks
1	20201200726	11	20201200431	Out of 20 samples Sr. No. 01 sample has been randomly selected.
2	20201200821	12	20201200423	
3	20201200430	13	20201200564	
4	20201200582	14	20201200601	
5	20201200718	15	20201200825	
6	20201200568	16	20201200827	
7	20201200546	17	20201200432	
8	20201200591	18	20201200829	
9	20201200644	19	20201200752	
10	20201200569	20	20201200590	

**3. TEST CODE AND PROCEDURE**

There is no Indian Standard Test Code available for testing of brush cutter as such.

**4. SPECIFICATIONS****4.1 General**

Name of the Machine

: Brush Cutter

Name and address of the manufacturer	: Husqvarna Zenoah Changzhou Machinery Co., Ltd, No. 366 Huanghe West Road, Xinbei District, Changzhou, Jiangsu, P. R. China
Name & Address of Applicant	: Husqvarna India Products Private Limited 5/5, Swees House, Sir P.S Sivasamy Salai, Mylapore, Chennai, Tamil Nadu-600004
Model	: 532RBS
Serial No.	: 20201200726
Type	: Shoulder Mounted Engine operated
Type of cutting attachment	: Straight blade
Year of manufacture	: 2020
Country of origin	: CHINA
Type of crops/bush recommended	: For bushes, weeds and grass cutting.

#### 4.2 Constructional details :

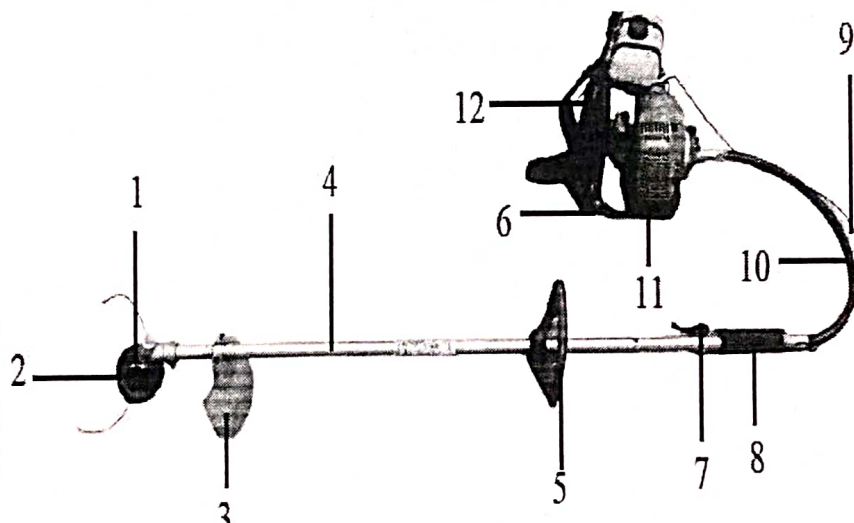


Fig. 1 : HUSQVARNA BRUSH CUTTER, MODEL: 532RBS

#### Keywords:

- |                                  |                                 |
|----------------------------------|---------------------------------|
| 1. Gear case                     | 7. Throttle cum clutch trigger  |
| 2. Nylon rope cutting attachment | 8. Handle grip                  |
| 3. Deflector                     | 9. Accelerator cable            |
| 4. Transmission cover pipe       | 10. Flexible drive shaft cover  |
| 5. Handle grip                   | 11. Engine mounting stand       |
| 6. Engine stopping switch        | 12. Cushion for operator's back |



**9. FIELD PERFORMANCE TEST**

Field tests were conducted for total of 25.67 hours duration. Bush cutting using straight blade attachments was carried out. A total of six test trials were conducted at rated speed of 7500 rpm. Detailed results of field tests are shown in ANNEXURE and summarized in the ensuing table.

**SUMMARY OF FIELD PERFORMANCE TEST**

Sl. No.	Parameters	Bush cutting
1	2	3
1	Thickness of Bush stem at cutting height (mm)	4.42 to 12.02
2	Number of Bush stem in 1m <sup>2</sup>	35 to 55
3	Average height of Bush (m)	0.20 to 2.74
4	Mass of Bush cut (kg/h)	795.7 to 1929.4
5	Mass of Bush cut (kg/ha)	16884 to 38974
6	Rate of work (ha/h)	0.047 to 0.054
7	Time required for one hectare (h)	18.5 to 21.22
8	Fuel consumption	
	-l/h	1.10 to 1.38
	-l/ha	23.42 to 28.29

**9.1 Bush cutting using straight blade**

**9.1.1 Rate of work**

- The area of cut was recorded as 0.047 to 0.054 ha/h.
- Time required for one hectare was recorded as 18.5 to 21.22 hours.
- Mass of weeds cut was 795.7 to 1929.4 kg/h.

**9.1.2 Fuel consumption**

- Fuel consumption was observed as 1.10 to 1.38 l/h and 23.42 to 28.29 l/ha.

**9.2 Labour/operator requirement :**

It was observed that an averagely built person can able to operate the brush cutter for 25 to 45 minutes at a stretch. Hence, two operators are required for continuous operation of the brush cutter.

**10. EASE OF OPERATION AND ADJUSTMENTS**

No noticeable difficulties were observed in operation and adjustment during the field test.

**11. DEFECTS, BREAKDOWNS AND REPAIRS**

No defect/breakdown was occurred during 25.67 hours of field operation.

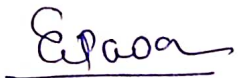
Machine 83/454	(INCOMPLETE REPORT) 532RBS HUSQVARNA BRUSH CUTTER	COMMERCIAL (INITIAL)
----------------	--	-------------------------

## 12. COMMENTS & RECOMMENDATIONS

- 12.1 The machine was withdrawn by the applicant from testing. Accordingly as per request of the applicant as such the incomplete test report is released.
- 12.2 The engine was not marked with Manufacturer name or trade-mark, Rated power, Rated speed and type of fuel used which does not fulfill the requirement of IS 7347-1974 (Amended 2011). This should be looked into.
- 12.3 As a safety wear only goggle (safety glass) was provided with the machine. The applicant has strictly advised to provide the entire safety kit viz. helmet, hand gloves, ear plug, mask, safety shoes etc. along with each machine for the safety of operator.
- 12.4 **Adequacy of Literature**  
The following literature in English language was provided for reference during testing:  
  - Operator's/ Service manual
  - Parts catalogue
It is recommended to bring out the manual in Hindi and other vernacular languages as per IS: 8132-1999.

### TESTING AUTHORITY

  
 (M.R. PATIL)  
 AGRICULTURAL ENGINEER

  
 (S.G. PAWAR)  
 AGRICULTURAL ENGINEER

  
 (Dr. P.P. RAO)  
 DIRECTOR

Draft test report compiled by - **Shri Khagendra Bora**  
Sr. Technical Assistant