

प्रारंभिक व्यावसायिक परीक्षण रिपोर्ट

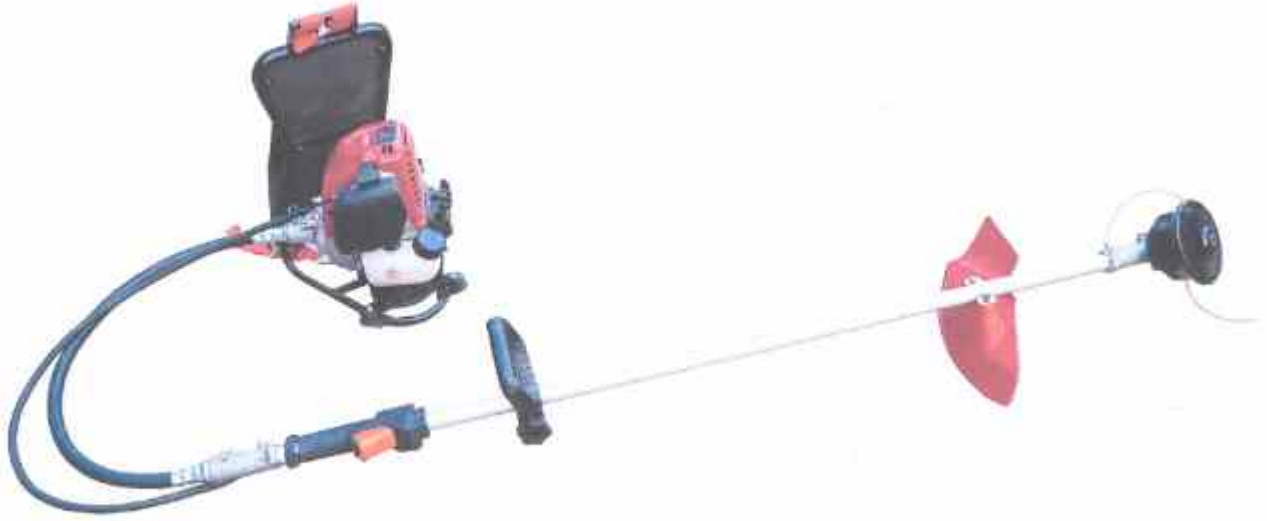
INITIAL COMMERCIAL TEST REPORT

THIS TEST REPORT VALID UP TO

संख्या/No. CSIR/CMERI/FMTTC/2024/018

माह/Month: June, 2024

: 31st MAY, 2031



SAI AGRO EQUIPMENT
BRUSH CUTTER 4 STROKE 35 CC
(MODEL – SAI-bc-35)



सत्यमेव जयते
Government Of India



कृषि मशीनरी प्रशिक्षण और परीक्षण केंद्र
Farm Machinery Training and Testing Centre
सीएसआईआर- केन्द्रीय यांत्रिक अभियांत्रिकी अनुसंधान संस्थान
CSIR - Central Mechanical Engineering Research Institute
महात्मा गांधी एवेन्यू, दुर्गापुर
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CSIR/CMERI/FMTTC/2024/018	SAI AGRO EQUIPMENT BRUSH CUTTER (MODEL NO.-SAI-bc-35) (INITIAL COMMERCIAL TEST)
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Name of Machine : Brush Cutter 4 Stroke 35 cc
Type : Engine Operated Back Pack Brush Cutter
Make : SAI Agro Equipment
Model : SAI-bc-35
Name and address of Manufacturer : SAI Agro Equipment
AT/PO : Swampatna, Dist. – Keonjhar,
Odissa – 758030.
Name and address of Applicant : SAI Agro Equipment
AT/PO : Swampatna, Dist. – Keonjhar,
Odissa – 758030.
Test Conducted at : Farm Machinery Training & Testing Center,
CSIR – Central Mechanical Engineering
Research Institute, M G Avenue, Durgapur,
Pin – 713209, West Bengal

THIS TEST REPORT IS VALID UP TO: 31st MAY, 2031
[vide DAC&FW OM No. 13-22/2020- M&T (I&P) dated 12.12.2023]



Report No. : CSIR/CMERI/FMTTC/2024/018 Month : June Year : 2024

CSIR - Central Mechanical Engineering Research Institute,
Durgapur - 713209
(W.B.), INDIA

Farm Machinery Training and Testing Centre,
CSIR-Central Mechanical Engineering Research Institute, Durgapur
THIS REPORT IS VALID UPTO: 31st May, 2031

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Report prepared by

Report verified by
Subrata Kumar Mandal

5 SPECIFICATIONS

5.1 General

Type of machine	: Brush Cutter 4 Stroke 35 cc
Make	: SAI Agro Equipment
Model	: SAI-bc-35
Serial No.	: SAI-bc-35-007/2024
Name and address of manufacturer	: SAI Agro Equipment AT/PO : Swampatna, Dist. – Keonjhar, Odissa – 758030.
Year of manufacture	: 2024
Country of origin	: N.A
Recommended use	: For cutting grass and weeds

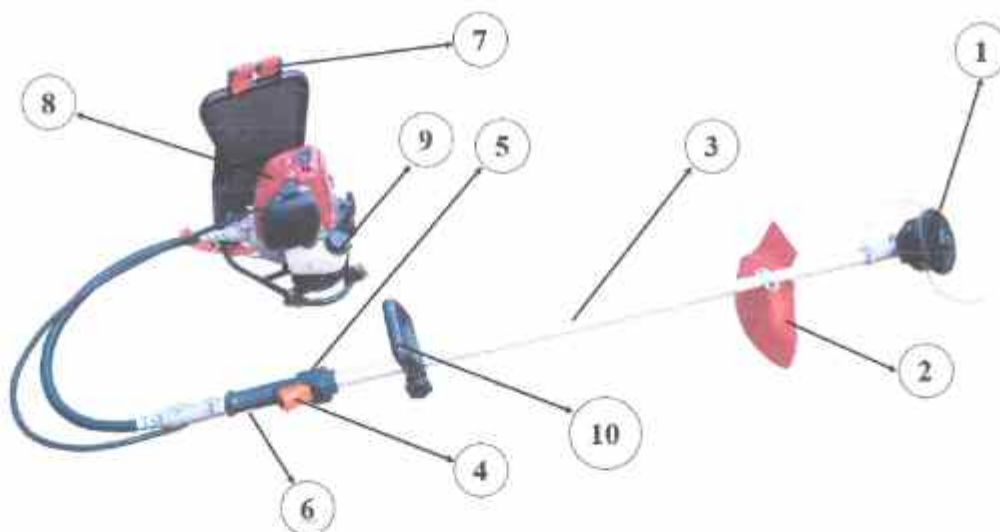


FIG. 1: SCHEMATIC VIEW OF BRUSH CUTTER

1. Rotor Blade	2. Grass deflector	3. Frame pipe
4. Throttle cum clutch lever switch	5. Engine stopping	6. Handle grip
7. Hook for attaching shoulder belt	8. Engine	9. Fuel tank
10. Pipe holder.		

12 EASE OF OPERATOR, ADJUSTMENT AND SAFETY

No problem was observed during the test except, the fatigue was observed during the operation of the machine due to excessive mechanical vibration and noise.

13 DEFECTS, BREAKDOWN AND REPAIRS

No breakdown occurred during 27.31 hours of operation.

14 COMMENTS & RECOMMENDATION

- 14.1** The noise level at the OEL lever is higher which needs to be reduced to improve the operator's comfort and safety.
- 14.2** The mechanical vibration is on the higher side. It is not just directly affecting the operator's health, safety, and comfort, but also adversely affect the useful life of the components. Corrective action needs to be taken to reduce the vibration level.
- 14.3** The hardness and chemical composition of the cutting blade does not meet the requirement as per IS: 6025 -1982. It should be looked into.
- 14.4** Periodical greasing is required to be done by removing Allen key bolts, which may be provided with grease nipples.

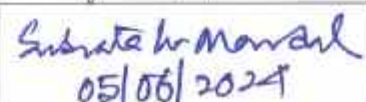
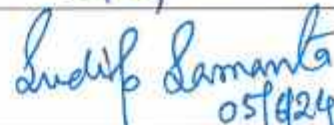
15 TECHNICAL LITERATURE

The following literatures are not provided by the applicant during the test along with the application form.

- a) User's manual book
- b) Parts' catalogue
- c) Service manual

These manuals need to be provided as per IS: 8132-1999.

TESTING AUTHORITY

Report Prepared by	Sr. Technical Officer, CSIR-CMERI Farm Machinery Testing Centre	 05/06/2024
Report Verified & Approved by	In-Charge, CSIR-CMERI Farm Machinery Testing Centre	 05/06/2024
Report Approved for release by	Head, Business Development Unit, CSIR-CMERI, Durgapur	 05/06/24

16 APPLICANT'S COMMENTS

Para No.	Our Reference	Applicant's Comments
16	14.1 to 14.4	We take necessary step with your recommendation in future production.

