

**THIS TEST REPORT IS VALID UPTO 30.09.2031**



**VARSHA, SW 10GDPE POWER WEEDER**



सत्यमेव जयते

भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि एवं किसान कल्याण विभाग

Department of Agriculture and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

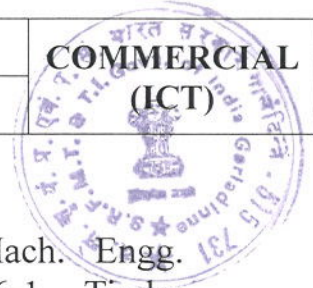
Southern Region Farm Machinery Training and Testing Institute

ट्रैक्टर नगर, गार्लदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.)

Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

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Machine- 669/1743	VARSHA, SW 10GDPE POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer, (apa) : M/s Varshaa Agro Mach. Engg.  
Private Limited., 1976-1, Tirchy  
Road Singanallur, Coimbatore,  
Tamil Nadu -641005, India.

Applicant : The manufacturer

**VARSHA, SW 10GDPE POWER WEEDER**

Report no.: Machine-669/1743

Month: October

Year: 2024

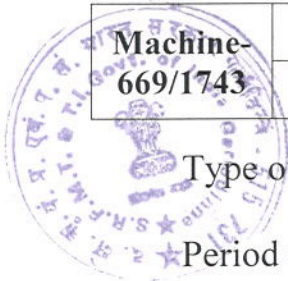


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<b>Machine- 669/1743</b>	<b>VARSHA, SW 10GDPE POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
	<b>THIS TEST REPORT IS VALID UP TO 30.09.2031</b>	

Type of test : COMMERCIAL (ICT)

Period of test : 09.10.2024 to 24.10.2024

Test Report No. : **Machine-669/1743**

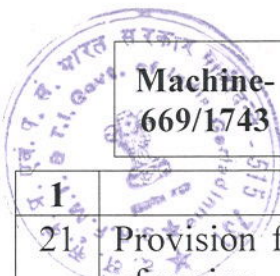
Month / Year of release : October, 2024

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The data given in this report pertain to the particular machine randomly selected by testing authority.
- iii) The results presented in this report do not, in anyway, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is a report on Commercial Test of Power Weeder named "**VARSHA, SW 10GDPE POWER WEEDER**". This report is valid up to **30.09.2031, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.**

### SELECTED CONVERSIONS

S. No.	Units	Conversion Factor
<b>1</b>	<b>Force</b>	
	1 kgf	9.80665 N 2.20462 lbf
<b>2</b>	<b>Power</b>	
	1 hp	1.01387 metric hp (Ps) 745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
<b>3</b>	<b>Pressure</b>	
	1 psi	6.895 kPa
	1 kgf/cm <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	100 kPa = 10 N/cm <sup>2</sup>
	1 mm of Hg	1.3332 m-bar





Machine-  
669/1743

VARSHA, SW 10GDPE POWER WEEDER  
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COMMERCIAL  
(ICT)

1	2	3	4	5
21	Provision for easy start of engine	Must be provided	Provided	Conforms
22	Provision for shield/cover to prevent flying of mud and stone from rotor	Must be provided	Provided	Conforms
23	Depth control mechanism	Must be provided	Provided	Conforms
24	Provision for transport wheels	Must be provided	Provided	Conforms
25	Provision for cover on exhaust	Must be provided	Provided	Conforms
26	Direction of exhaust emission away from operator	Must be provided	Provided	Conforms
27	Marking/labeling of machine	The labeling plate should be riveted on the body of the machine having name and address of manufacturer & applicant, country of origin, make, model, year of manufacturer, serial number, engine number, engine HP, rated rpm & SFC	Country of origin, Rated RPM & SFC are not provided	Does not conform
28	Literature	Operator manual, service manual and parts catalogue should be provided	Not Provided	Does not conform

## 18. COMMENTS & RECOMMENDATIONS

### 18.1 Engine Performance:

- 18.1.1 The maximum power was observed as 5.30 kW under natural ambient condition against the declared value of 5.3 kW.
- 18.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 422 g/kWh against the declared value of 480 g/kWh.
- 18.1.3 Back up torque of engine was observed as 5.0 % against declared value of 10%.
- 18.1.4 Max. torque was observed as 14.70 Nm against the declared value of 15.0 Nm.

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**18.2 Mechanical vibration:**

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 284 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

**18.3 Air cleaner oil pullover:**

The percentage of air cleaner oil pull over was recorded as 0.41 to 0.83 % against the declaration of 0.20%. The percentage of air cleaner oil pull over was considered very high and this should be looked into for corrective action.

**18.4 Marking /labeling:**

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, interlaid, the following must be provided:

- i) Country of origin
- ii) Rated RPM
- iii) Specific fuel consumption, (g/kWh)

**18.5 Technical literature:**

User's manual is not provided during the test. However, the same must be brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the guidance of users.




The following literature should be provided.

- i) Service manual
- ii) Parts catalogue



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### TESTING AUTHORITY

Er. PRAMOD YADAV AGRICULTURAL ENGINEER	
Dr. B.M. NANDEDE DIRECTOR	 

### 19. APPLICANT COMMENTS

Reference No.	Applicant's comments
18.2	We will insist strongly to the manufacturer to put some vibration dampeners to reduce the Mechanical vibration.
18.3	Your suggestion is noted, we will make a corrective action in future product.
18.4	Your suggestion is noted, we will modify the labelling plate of machine as per your recommendations
18.5	We will be brought out the literature as per IS 8132:1999 (Reaffirmed 2004)