



HUSQVARNA TF 545 DE POWER WEEDER



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation 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.)

[An ISO 9001:2015 CERTIFIED INSTITUTE]

Website: <http://srfmtti.dacnet.nic.in/>

E-mail: fmti-sr@nic.in

Tele./FAX: 08551-286441

Machine - 341/1153	HUSQVARNA TF 545 DE POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/s. Chongqing Weima Agriculture Machinery Co. Ltd., Area B, Luohuang Industry Zone, Jiangjin District, Chongqing, **China.**
(Designed in Husqvarna, Sweden)

Applicant : M/s. Husqvarna India (Products) Private Limited, First Floor, Swees House, No.5, Sir P S Sivasamy Salai Mylapore, Chennai - 600 004, Tamil Nadu, India.

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Report No. : Machine-341/1153 Month: May

Year: 2020



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plate

Presence of oil and water : None

in clutch housing

16.3 Transmission gears:

All the gears of the transmission system were found in normal working condition.

16.4 Rotary drive unit:

The rotary drive unit was dismantled and all the components were found in normal working condition.

17. COMMENTS & RECOMMENDATIONS

17.1 Engine Performance:

17.1.1 The maximum power and rated power were observed as 8.2 & 8.1 kW under natural ambient condition against the declared value of 7.0 & 6.3 kW.

17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 293 g/kWh against the declared value of 300 g/kWh.

17.1.3 Max. Torque was observed as 22.27 Nm against the declared value of 18.6 Nm.

17.1.4 Back up torque of engine was observed as 5.60 %.

17.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 22.27 Nm & 21.09 Nm respectively, while further loading, sudden drop of engine speed and thick black smoke was noticed.**

17.2 Max. Noise at operator's ear level was observed as 95 dB (A), which is higher as per ILO. Therefore corrective action to reduce the noise should also be taken.

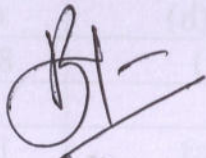
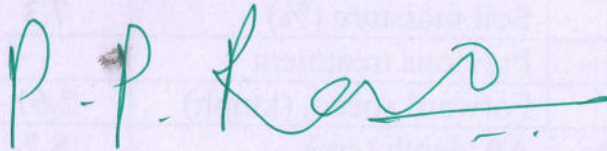
17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed on higher side and upto the maximum extent of 520 microns, Which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affect the useful life of the components. In view of the above, this should be taken care for corrective

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17.7 Technical literature:

The Operator's manual & parts catalogue of power weeder and engine in separate booklets were supplied with the test sample for reference during the test. It is however, recommended that same may be revised and bought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N. DIXIT AGRICULTURAL ENGINEER	
Dr. P.P. RAO DIRECTOR	

18. APPLICANT'S COMMENTS

Para No.	Our reference	Applicant's comments
(1)	(2)	(3)
18.1	17.2	We will take corrective action in future to further reduce noise levels.
18.2	17.3	We will take corrective action in future to reduce vibration.
18.3	17.5	We will look to improve the material of the blade
18.4	17.7	We will look to incorporate as suggested