



FORTUNEAGRO FAI-650N 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.)
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Tele.: 08551-286441

Machine-423/1257	FORTUNE AGRO FAI-650 N POWER WEEDER	COMMERCIAL (ICT)
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Manufacturer : M/s. Chongqing Wugu Power Equipment Co. Ltd., No. 8, Longfei Road, Dongcheng Street, Tongliang Town, Chongqing, **China.**

Applicant : M/s. Fortune Agro Impex, Fortune House, #343, 9th block, Sir M. Visvesvaraya Layout, Kengunte 1st Main Road, Bangalore-560 056, Karnataka, India.

FORTUNEAGRO FAI-650N POWER WEEDER

Report No. : Machine-423/1257

Month: March

Year: 2021



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- Intake valve : 0.09	Against the discard limit of 0.30 mm
- Exhaust valve : 0.07	

15.2 Clutch:

Any marked wear in clutch friction plate : None

Condition of clutch release bearing. : Normal

Condition of pilot bearing : Normal

Condition of pressure plate : Normal

Presence of oil and water in clutch housing : None

15.3 Transmission gears:

All the Gears and sprockets of the transmission system were found in normal condition.

15.4 Rotary drive unit:

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

16. COMMENTS & RECOMMENDATIONS




16.1 Engine Performance:

- 16.1.1 The maximum power and rated power were observed 4.4 kW under natural ambient condition against the declared value of 4.2 kW.
- 16.1.2 Specific fuel consumption of engine corresponding to maximum power & rated power was recorded as 392 g/kWh against the declared value of 345 g/kWh. This should be looked into for corrective action.
- 16.1.3 Max. torque was observed as 13.95 Nm against the declared value of 16.5 Nm.
- 16.1.4 Back up torque of engine was observed as 3.88 %, against the declared value of 10 %. This should be looked into for corrective action.
- 16.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 14.5 Nm & 13.6 Nm respectively, while further loading, sudden drop of engine speed and engine stalling was observed and also noticed the thick black smoke too.**

16.2 Max. Noise at operator’s ear level & by stander’s position was observed as 84 & 75 dB (A) respectively against the limit specified by the ILO.

- 16.3** The amplitude of mechanical vibration on various assemblies marked as (*) in chapter 8 of this test report is on higher side, especially at gear shifting lever, handle bar and accelerator lever. This calls for dampening
- 16.4** The hardness of rotary blades conforms to the requirement of IS 6690:1981 (Reaffirmed 2012).
- 16.5** The chemical composition of rotary blade does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.
- 16.6** The provided labeling plate should be as per the requirement IS.
- 16.7 Technical literature:**
User/Operator and service manual & parts catalogue of Power Weeder & engine in separate booklets in English were supplied with the test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2004) for the sake of user & technical personnel. The literature required to be revised with all necessary information, service schedule, etc.

TESTING AUTHORITY:

D.C. MOULI AGRICULTURAL ENGINEER	
P.C. MESHAM SENIOR AGRICULTURAL ENGINEER	
Dr. P.P. RAO DIRECTOR	

17. APPLICANT's COMMENTS

We have gone through the draft test report details, comments and recommendations given by Institute and with immediate effect we will inform to the production unit to consider comments and recommendations and take care the corrective actions before dispatching the material from the factory.

ANNEXURE