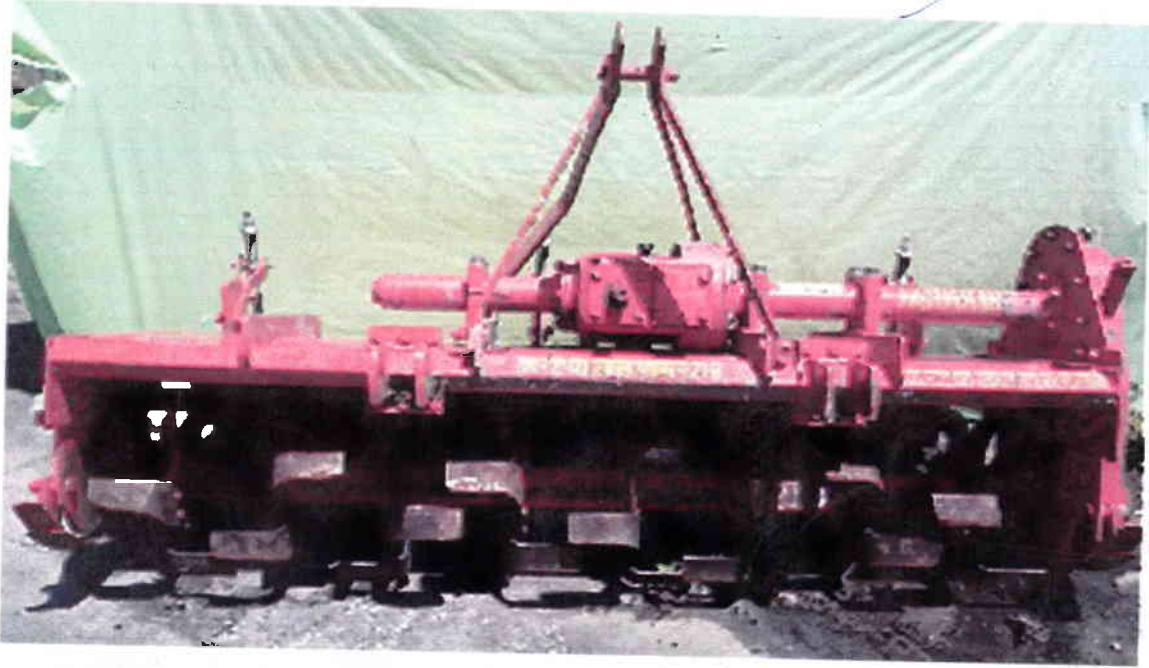


व्यावसायिक परीक्षण रिपोर्ट  
COMMERCIAL TEST REPORT

संख्या/No. : Imp: 72/112  
माह /Month : June, 2010



FARMKING MODEL FKRT -17542 ROTAVATOR (Tractor Operated)



सत्यमेव जयते

भारत सरकार

GOVERNMENT OF INDIA

कृषि मन्त्रालय

MINISTRY OF AGRICULTURE

(कृषि एवं सहकारिता विभाग)

(DEPARTMENT OF AGRICULTURE AND CO-OPERATION)

उत्तर पूर्वी क्षेत्र कृषि यन्त्र प्रशिक्षण एवं परीक्षण संस्थान

NORTH EASTERN REGION FARM MACHINERY TRAINING AND TESTING INSTITUTE

विश्वनाथ चारिआलि, शोणितपुर, असम

BISWANATH CHARIALI:: SONITPUR:: ASSAM - 784 176

Web site: <http://dacnet.nic.in/nerfmtti>

Telephone: 03715-222094

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

Fax: 03715-222374

112

Lib

**1 SCOPE OF TEST**

The scope of test was to check and assess the following: -

**1.1 LABORATORY TEST:**

- Checking of specifications
- Hardness of soil engaging parts (Rotavator blades)
- Chemical analysis of critical components (Rotavator blades)
- Wear analysis of critical components

**1.2 FIELD TEST:**

- Rate of work.
- Quality of work
- Ease of operation, maintenance and adjustments
- Labour requirement
- Defects, Breakdowns & Repairs

**2 METHOD OF SELECTION**

The machine was directly submitted by the applicant for test at this Institute, therefore the method of selection is not known.

**3 TEST PROCEDURES**

- i) IS: 6690-1981: Specification for Blades for rotavator for power tillers. (Reaffirmed in 2007)
- ii) IS: 4931-1995 – Agricultural tractors-Rear Mounted PTO. (Reaffirmed in 2009)
- iii) IS: 4468 – 1997 (Pt-1) Agricultural wheeled Tractors- Rear Mounted three point linkage. (Reaffirmed in 2007)
- iv) IS: 11531-1985 Test code for puddler. (Reaffirmed in 2006)

**4 SPECIFICATIONS****4.1 General:**




|                                 |   |  |
|---------------------------------|---|--|
| Manufacturer                    | : | Shri Kanhaiyal Ramratan Krishi Yantra<br>Laghu Udyog,<br>N.H.11, Jaipur-Sikar Road,<br>Bus Stand Rampura Dabari,<br>Jaipur- 303 704      |
| Name of machine                 | : | Rotavator (Tractor Operated)   |
| Type                            | : | Gear type  |
| Make                            | : | Farmking   |
| Model                           | : | FKRT -17542  |
| Serial number                   | : | Not specified  |
| Year of manufacture             | : | 2010 (apa)   |
| Type of blade                   | : | Hatchet (L – type)   |
| Working width of implement (mm) | : | 1540   |
| Power source as recommended     | : | 50 hp and above  |
| Prime Mover Used during test    | : |  |
| Name of Tractor                 | : | New Holland -5500  |
| Max. PTO power, kW              | : | 34.9   |
|                                 |   | As per test Report No. T-556/1048 released<br>by CFMT&TI, Budni (MP)<br>(Details specification of tractors is given in<br>Annexure-III ) |

**11. COMMENTS AND RECOMMENDATIONS**

- 11.1 The specifications of implement hitch does not conform to the IS: 4468 (Pt-1)-1997. Needful, therefore may be done in this regard.
- 11.2 The dimension of splined end pinion shaft does not conform to IS: 4931-1995 This should be looked into for necessary action.
- 11.3 The viscosity of oil used in gear boxes of rotavator should be given in literature and suitable sticker should also be pasted on rotavator.
- 11.4 It is recommended to have provision of change in rotor speed to suit wider range of soil and soil moisture condition.
- 11.5 The marking/ labeling plate is provided with implement. All details of particulars are not provided. Hence, particulars like make, model, year of manufacture, size and recommended power should be stamped, engrossed or embossed on metallic plate rigidly attached or riveted on a non-wearing part of the implement
- 11.6 Drain plug on secondary gear box should be provided for easy removing of oil.
- 11.7 Oil leakage from rotor fixing bolt to secondary gear box was observed. It should be looked into for corrective action
- 11.8 Adequacy of literature:  
Operator manual cum spare parts cum service manual is provided in English language which is adequate in information. Separate literatures according to model should be provide with safety note warnings, accessories and attachments, maintenance instruction and instruction for storage, handling transport, installation, etc.

The cover should be of reasonable durability and should be of an appropriate size to protect the internal pages and the binding should be appropriate and durable for the intended usage. The literature should be provide in Hindi and other regional languages for operator's use as per IS: 8132-1999

**TESTING AUTHORITY**

|  |  |
|--|--|
| <b>P. C. MESHRAM</b><br>ASSISTANT ENGINEER (TESTING) |  |
| <b>P. K. PANDEY</b><br>SENIOR TEST ENGINEER          |  |
| <b>M.K.VISHWAKARMA</b><br>DIRECTOR                   |  |

|             |  |    |
|-------------|--|----|
| Imp. 72/112 | FARMKING MODEL: FKRT -17542 ROTAVATOR (Tractor Operated) - [ ICT ] | 15 |
|-------------|--|----|

**12. APPLICANT'S COMMENTS**

| Para No. | Our Reference | Applicant's comments   |
|----------|---------------|--|
| 12.1     | 11.1          | <p>a) Regarding diameter of lower hitch point- hitch pin hole, we have now changed our drawing and will follow the ISI specification.</p> <p>b) Regarding diameter of lower hitch pin (G), we have now changed the drawing and assure to follow the ISI diameter of hitch pin specification.</p> <p>c) Regarding diameter of linch pin hole, we have now modified as per ISI specification at our end.</p> |
| 12.2     | 11.2          | <p>a) Regarding BΦ of splined end pinion shaft, we assure we will be more careful and strict in future production.</p> <p>b) Chamfer 'a' of splined end pinion shaft is less as per specification; we will take necessary and prompt action in future.</p>   |
| 12.3     | 11.3          | Viscosity will be mentioned in our Manual Book for operator and sticker for same will be pasted on rotavator.  |
| 12.4     | 11.4          | Four speeds of rotor shaft can be achieved by rotating/changing gear set i.e. 109 rpm,205 rpm,231 rpm and 436 rpm  |
| 12.5     | 11.5          | Now we are using the number plate containing all particulars   |
| 12.5     | 11.7          | Necessary steps will be taken definitely.  |