

व्यावसायिक परीक्षण रिपोर्ट  
COMMERCIAL TEST REPORT

संख्या / No. : Imp.122/169  
माह / Month: January, 2013



**HIRA -777 ROTAVATOR (TRACTOR MOUNTED)**



सत्यमेव जयते

भारत सरकार  
GOVT OF INDIA

कृषि मन्त्रालय

MINISTRY OF AGRICULTURE

कृषि एवं सहकारिता विभाग

DEPARTMENT OF AGRICULTURE AND COOPERATION

उत्तर पूर्वी क्षेत्र कृषि यंत्र प्रशिक्षण एवं परीक्षण संस्थान

**NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE**

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#### 4. SPECIFICATIONS

##### 4.1 General:

- Manufacturer : M/s Hira Combines Pvt. Ltd.  
Cantt. Road Nabha-147201(PB) India
- Name of machine : Rotavator
- Type : Rotary type
- Make : HIRA
- Model : HIRA 777
- Serial number : N.A.
- Year of manufacture : 2012
- Type of blade : Hatchet (L-Shaped)
- Working width of implement (mm) : 2070 mm
- Recommended power source : 55 to 65 HP
- Prime Mover Used during test : John Deer 5310, collar shift Tractor

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### **8.EFFECTIVENESS OF SEALINGS**

After completion of dry & wet land operation for 25.0 and 16.30 hours respectively, the implement was dismantled for checking the effectiveness of sealing provided against ingress of dust, and water/mud in various sub-assemblies/components. The observations are given in ensuing table:

Sl. No.	Location	Whether ingress of mud and/or water was observed (Yes/No)
1	Primary reduction gear box	No
2	Secondary reduction gear box	No
3	Rotor assembly (hub)	No

### **9.EASE OF OPERATION & ADJUSTMENTS**

No noticeable difficulty was observed during the operation and adjustment of rotavator.

### **10. DEFECTS, BREAKDOWNS AND REPAIRS**

No noticeable defect or breakdown was observed during 41.3 hours of field operation.



### **11. COMMENTS AND RECOMMENDATIONS**

- 11.1 The specifications of implement hitch, does not conform to the IS: 4468 (Part-1)-1997. Hence, it is recommended that implement should be provided with the hitch conforming to relevant Indian standards.
- 11.2 Dimensions of PIC of implement & PIC yoke bore of PTO drive shaft, does not conform to IS: 4931-1995 and, therefore, it should be looked into.
- 11.3 Suitable stickers, labeling plate indicating the grade & change period of oil used in gear boxes should be pasted on Rotavator.

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- 11.4 Hardness and chemical composition of rotor blades does not conform to relevant Indian Standards. This needs to be looked into for corrective action.
- 11.5 Month /Year of manufacture's name and trade mark, (if any), size of implement and power required should also be indicated on the labeling plate.
- 11.6 **Technical literature:**  
A booklet, named Instructional manual and Parts list was provided for reference during testing.  
The tractor(s), with which machine is considered suitable for operating in the field, should be prominently mentioned in the Technical literature.

### TESTING AUTHORITY

SANJAY KUMAR AGRICULTURAL ENGINEER	
M. K. VISHWAKARMA DIRECTOR	

Test conducted by : P.C DHINGIYA  
SENIOR TECHNICAL ASSISTANT

Report compiled by : ANSHUL PANDEY  
SENIOR TECHNICAL ASSISTANT  
(Inst.)

### 12. APPLICANT'S COMMENTS

No comments have been received from the applicant on this machine.