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### व्यावसायिक परीक्षण रिपोर्ट COMMERCIAL TEST REPORT

संख्या / No. : imp.125/172

माह / Month: February, 2013



HIRA -577 ROTAVATOR (TRACTOR MOUNTED)



1520 Tir.

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

> विश्वनाथ चारिआलि, जिला-शोणितपुर (असम) BISWANATH CHARIALI :: SONITPUR :: ASSAM, PIN - 784 176

> > Website: http://nerfmtti.dacnet.nic.in

Ph. No. 03715-222094

E-Mail: fmti-ner@nic.in

Fax No: 03715-230358

#### HIRA - 577 Rotavator (Tractor - mounted) [Commercial Test]

### 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 577

Serial number

Not Specified

Year of manufacture

2012

Type of blade

Hatchet (L-Shaped)

Working width of implement (mm)

1430 mm

Recommended power

40 to 45 HP

source

Prime Mover Used during

test

: New Holland 5500, John Deer 5310 collar

shift Tractor

Imp.125/172

# HIRA - 577 Rotavator (Tractor - mounted) [ Commercial Test ]

23

#### 8.EFFECTIVENESS OF SEALINGS

After completion of dry & wet land operation for 25.20 and 15.17 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 40. 37 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.
- 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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- Hardness and chemical composition of rotor blades does not conform to relevant Indian Standards. This needs to be looked into for corrective action. 11.4
- Month / Year of manufacture's name and trade mark, (if any), size of implement and power required should also be indicated on the labeling 11.5 plate.

#### Technical literature: 11.6

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	EKUMOZ
M. K. VISHWAKARMA DIRECTOR	NESSEM
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.