

श्रु.वयात्रव्याक्याक्षे.य

AGRICULTURE MACHINERY CENTRE

MINISTRY OF AGRICULTURE AND FORESTS PARO: BHUTAN

Test Result Sheet/AMC No: 2016002

Date: 01.04.2016

Type of Machine:- Power Tiller

Model: Yanmar, YZC-D

Manufacturer: Yanmar Co. Limited

1. Specification:

a. Structure:

Overall Length (mm)	Overall Width (mm)	Overall Height (mm)
2165	866	1176

b. Engine: 4-strokes, Diesel, Single Cylinder, Direct Injection, Rated Engine Speed: 2400 rpm, and

Maximum Power: 11.0 hp

c. Transmission: Mechanical, 3 Forwards and 1 Revise Gears, Main Disk Clutch and Steering Clutch,

Nominal Speed at Highest Gear: 9 km/h

d. Tyre: Pneumatic

Size:- 6 – 12 Tread:- 700

e. Implements:

1. Plow: Matsuyama MR - 83

2. Rotary: Standard model of YZC-D

3. Trailer: Wangchuk Agro Engineering Make

2. Test Results:

2.1 Safety Device:-

Remarks: Safety requirements are complied.

2.2 Maximum Output Engine Power at 2250 masl:- (Standard: ≤30% power reduction)

Particular	Rated	Manufacturer Max	Max Output Engine	Engine Power	
	rpm	Rated Power (hp)	Power (hp)	Reduction (%)	
Mean	2400	11	8.08±0.45	24.78 ±4.7	

Atmospheric Condition: Temperature: 25 °C, Relative Humidity; 45 %, Pressure: 773 hpa

2.3 Operation Test

2.3.1 Field Efficiency:-

Implements used	Gear position	Field capacity (acre/day)	Fuel Consumption
		(Mean Value)	(L/ day) (Mean Value)
Plough	2	0.96±0.14	4.64±0.65
Rotary	3	3.17±1.26	13.89±5.63

Note: One day is expressed for 7 working hours

2.3.2 Vibration Level:- (Standard:< 15 m/sec²)

Test Points	M	Mean Value (m/sec ²) at different Throttle Positions		
	Low	Middle	High	Remarks

PABX: 271234, 271460, Fax: 271568. Program Director: 272008, FMS: 272130 Accounts: 272451, AMCS: 272283

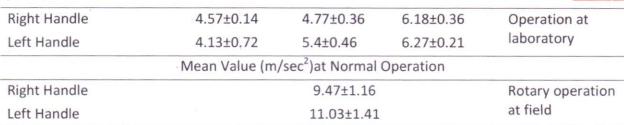
E-mail: amc@moaf.gov.bt Post Box # 1228



स्.वयापर्तिज.क्याक्रे.ची

AGRICULTURE MACHINERY CENTRE





2.3.3 Sound Level: (Standard:<100dB(A))

Operation (Field)	Mean Value, Noise Level (dB(A)), Positions	
	Left	Right
Rotavating	87.66 ±2.08	87.66±2.08

2.3.4 Service Brake Value: (Standard: <5 m stopping distance)

Parameters	With load (Mean Value)	Without load (Mean Value)
Stopping distance (m)	1.77±0.02	1.62±0.15
Travelling speed (km/h)	9.00±3.96	9.38±4.20

2.3.5 Parking Brake Value (Standard: No wheel movement at 18% slope)

Parking Brake Lever	Wheel moveme	ent observation
	Facing Upward	Facing Downward
Engaged	No movement	No movement

2.3.6 Handling Remarks: The machine was operated in smooth normal condition without hindrance.

2.3.7 Water Proofing Remarks:

Items	Observations	
Infiltration of water in axle case	No water observed in axle case	
Infiltration of water in auxiliary transmission	No water observed in auxiliary transmission	
case case		

Manager
Agriculture Machinery Certification Section
AMC/DoA/MoAF: Paro

Head, AMCS

Programme Director
Agriculture Machinery Centre
Paro: Bhutan

1 dio 1 bilatair

Program Director, AMC

PABX: 271234, 271460, Fax: 271568. Program Director: 272008, FMS: 272130 Accounts: 272451, AMCS: 272283

E-mail: amc@moaf.gov.bt Post Box # 1228