



भारत सरकार / GOVERNMENT OF INDIA  
उत्तरी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान  
**Northern Region Farm Machinery Training and Testing Institute**  
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**TECHNICAL SPECIFICATIONS FOR BRUSH CUTTER**

<b>1</b>	<b>General:</b>		
	Name of machine	:	
	Type of machine	:	
	Name of manufacturer and address	:	
	Name of applicant and address	:	
	Make	:	
	Model	:	
	Sr. No.	:	
	Brand's Name	:	
	Country of origin	:	
	Year of manufacture	:	
	Recommended use	:	
<b>2</b>	<b>Details of prime mover:</b>		
	Manufacturer	:	
	Make	:	
	Model	:	
	Type	:	
	Serial No.	:	
	Year of manufacture	:	
	Country of origin	:	
	Maximum power, kW (Ps)	:	
	Recommended high idle speed, rpm	:	
	Recommended low idle speed, rpm	:	
	Rated engine speed, rpm	:	
	Speed at maximum torque, rpm	:	
	Recommended no load engine speed for field operation, rpm	:	
	Whether the prime mover has already been tested by authorized testing centre (Yes/No)	:	
	If yes, then specify the valid test report No. & upload copy of test report	:	
<b>3</b>	<b>Cylinder and cylinder head:</b>		
	Number	:	
	Disposition	:	
	Bore/stroke, mm	:	
	Capacity, cc	:	
	Make of carburetor	:	
	Type of carburetor	:	

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	Make of spark plug	:	
	Model of spark plug	:	
	Spark plug electrode gap, mm	:	
<b>4</b>	<b>Fuel supply system:</b>		
	Type of fuel system	:	
	Material of fuel tank	:	
	Capacity of fuel tank, l	:	
	Location of fuel tank	:	
	Type of fuel filter	:	
	Fuel on/off	:	
<b>5</b>	<b>Air cleaner:</b>		
	Make	:	
	Type	:	
	Type of element	:	
	Location	:	
	Recommended service schedule, h	:	
<b>6</b>	<b>Exhaust system:</b>		
	Type of silencer	:	
	Position of silencer	:	
<b>7</b>	<b>Lubrication system:</b>		
	Type	:	
	Type of lubricant recommended	:	
	Ratio of mixing of lube. Oil with fuel	:	
<b>8</b>	<b>Cooling system:</b>		
	Type	:	
<b>9</b>	<b>Starting system:</b>		
	Type	:	
	Ignition system	:	
	Aid for cold starting	:	
	Any other provision for easy starting	:	
<b>10</b>	<b>Transmission system:</b>		
	Type	:	
	Mode of power transmission	:	
	No. of teeth on pinion gear	:	
	No. of teeth on crown	:	
	Reduction ratio	:	
	Method of lubrication	:	
<b>11</b>	<b>Cutting attachments:</b>		
	Cutter speed corresponding to engine speed recommended for field operation, rpm	:	
<b>11.1</b>	<b>Nylon rope:</b>		
	Material	:	
	Rope size, mm	:	
<b>11.2</b>	<b>Triangular blade:</b>		
	Material	:	
	Diameter, mm	:	
	Width at tips, mm	:	
	Width of beveled edge, mm	:	

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	Thickness at tip, mm	:	
<b>12</b>	<b>Safety provisions:</b>	:	
<b>13</b>	<b>Overall dimensions, mm:</b>		
	Length (with nylon rope assembly)	:	
	Length (with triangular blade assembly)	:	
	Width	:	
	Height	:	
<b>14</b>	<b>Mass, kg:</b>		
	Without cutters and guard	:	
	With circular disc paddy cutter attachment	:	
	With triangular blade and grass deflector	:	
	With nylon rope and grass deflector	:	
<b>15</b>	<b>Color of machine:</b>		
	Engine	:	
	Chassis	:	
	Fuel tank	:	
<b>16</b>	<b>Marking/Labeling plate:</b>	:	

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## ADDITIONAL INFORMATION

<b>1. Engine Performance:</b>			
<b>i.</b>	Maximum Power, kW (Ps)	:	
<b>ii.</b>	Rated Power, kW(Ps)	:	
<b>iii.</b>	Specific fuel consumption corresponding to maximum power, kg/kWh (g/hph)	:	
<b>iv.</b>	Maximum equivalent crankshaft torque, Nm (kgf-m)	:	
<b>v.</b>	Back-up torque (%)	:	
<b>vi.</b>	Maximum Engine oil temperature, °C	:	
<b>vii.</b>	Maximum Coolant (water)/liner wall temperature (°C)	:	
<b>viii.</b>	Lubricating oil consumption (g/kWh)	:	
<b>ix.</b>	Coolant consumption (% of total Coolant capacity)	:	
<b>x.</b>	Smoke level (Bosch No.)	:	
<b>2.</b>	Mechanical Vibration at steering/hands	:	
<b>3.</b>	Air cleaner-oil pullover:		
	-Maximum oil pull-over (%)	:	
<b>4.</b>	<b>Noise level:</b>		
	-Maximum ambient noise level, dB(A)	:	
	-Maximum noise level at the Operator's ear level, dB(A)	:	

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Sl. No.	Critical engine components	Initial Setting	Discard Limit
1	Cylinder bore dia. (mm)		
2	Piston to cylinder clearance at skirt (mm)		
3	Piston dia. (mm)		
4	<b>Ring-end gap (mm):</b>		
	-Top compression ring		
	-2 <sup>nd</sup> compression ring		
	-3 <sup>rd</sup> compression ring		
	- Oil ring		
5	<b>Ring groove clearance (mm):</b>		
	-Top compression ring		
	-2 <sup>nd</sup> compression ring		
	-3 <sup>rd</sup> compression ring		
	- Oil ring		
6	<b>Clearance of big end bearings (mm):</b>		
	- Diametrical		
	- Axial		
7	Crankshaft end float (mm)		
8	Backlash of timing gears (mm)		
9	Backlash of primary gear box gears (mm)		
10	Backlash of secondary gear box gears (mm)		
11	Overall thickness of clutch plate (mm)		
12	<b>Spring stiffness, N/mm (kgf/mm):</b>		
	-Inlet		
	-Exhaust		
13	<b>Clearance between valve guide and valve Stem (mm):</b>		
	-Inlet		
	-Exhaust		

Date:

Place:

Signature:

Name of signatory:

Designation:

Name & address of firm:

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