

KisanKraft Power Weeder/Brush Cutter (KK-BC-7640)



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

विश्वनाथ चारिआलि, जिला-शोणितपुर (असम)

BISWANATH CHARIALI :: SONITPUR :: ASSAM, PIN - 784 176

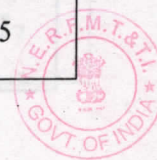
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1. SCOPE OF TEST

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

1.1 Laboratory test

- Checking the specification and other data furnished by the applicant
- Noise measurement
- Mechanical vibration measurement
- Hardness & chemical analysis of critical components
- Wear analysis of critical components

1.2 Field test

- Rate of work
- Quality of work
- Labour requirement
- Adequacy of power of prime mover
- Ease operation & adjustments
- Defects, Breakdowns & Repair

2. METHOD OF SELECTION

The test sample was submitted directly to this Institute by the applicant. Hence, the method of selection is not known.

3. TEST PROCEDURE

There is no Indian Standard Test Code available for testing of Brush cutter/Power weeder as such. The guidelines, however, have been taken from the following codes:

- i) IS: 11467 - 1985 : Test code for cereal harvesting machine
- ii) IS: 6025 - 1982 : Specification for knife sections for harvesting machines

4. SPECIFICATIONS

4.1

General

- Name of Machine : Power weeder/Brush cutter
- Type of Machine : Self propelled
- Manufacturer : M/s Shandong Huasheng
Pesticides Machinery Co. Ltd.,
1 Zhongtian Road, High and New Tech
Industrial Dev Zone, Linyi, Shandong, China
- Make : KisanKraft
- Model : KK-BC-7640

Country of origin : China
 Frame Serial no. : Not Specified
 Year of manufacture : Not Specified
 Name & Address of Applicant : M/s Kisankraft Machine Tools Pvt. Ltd.,
 32/5C, Dasarahalli Village, Dasarahalli
 Main Road, H.A. Farm Post,
 Hebbal, Bangalore-560024
 Type of weeds/brush recommended : All kinds of weeds/brushes

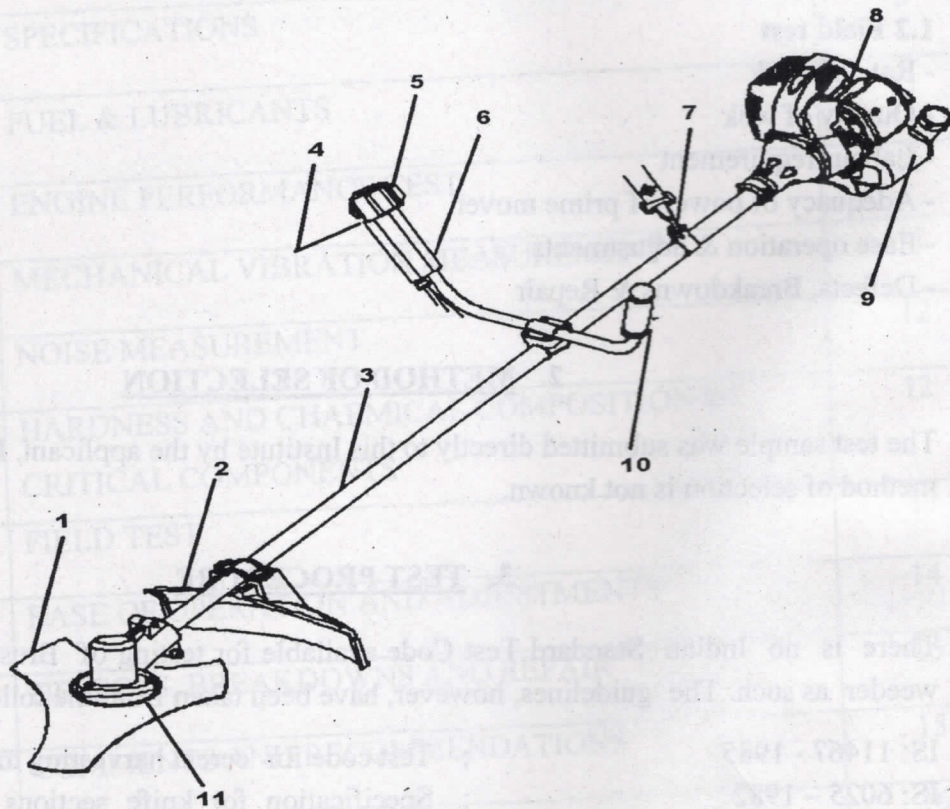


Fig. 1: Schematic view of KisanKraft Power Weeder/Brush Cutter (KK-BC-7640)

KEY WORDS:

- | | |
|-------------------------------------|------------------------------|
| 1. Blade | 2. Grass deflector |
| 3. Frame-pipe | 4. Throttle cum clutch lever |
| 5. Engine stopping switch | 6. RHS handle |
| 7. Hook for attaching shoulder belt | 8. Engine |
| 9. Fuel tank | 10. LHS handle |
| 11. Gear case | |

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deflector attachment was assessed with the help of Polar Heart Rate Monitor, model-RS 400 on the basis of resting, average and maximum heart rate of the operator during working. Details of work-rest cycle is as given below:

30 minutes work → 15 minutes rest → 30 minutes work → 15 minutes rest → 25 minutes work → 20 minutes rest → 25 minutes work → and so on. Details of demographic information of the operator is given in *ANNEXURE-III*.

12. DEFECTS, BREAKDOWNS AND REPAIR

No breakdowns were occurred during 20.3 hours of field test.

13. COMMENTS & RECOMMENDATIONS

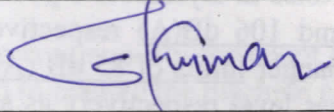

- 13.1** Noise at Bystander's position and Operator's ear level was observed as 88 dB(A) and 106 dB(A) respectively which is on very higher side against warning and danger limits of 85 dB (A) and 90 dB (A) for Bystander's position and Operator's ear level respectively as specified by ILO for continuous exposure of 8 hours per day. This calls for reduction in noise level to improve the operational comfort and safety.
- 13.2** The amplitude of mechanical vibration on various assemblies of the machine is observed on very higher side. This calls for dampening down of vibration to improve the operational comfort and service life of components.
- 13.3** During testing, only Goggles and ear plugs were provided as protective devices. All the necessary protective accessories, as mentioned in the Owner's manual, like arm cover, gloves, leg protector, face shield, helmet, etc was not provided. All these should necessarily be provided for the safety of operator.
- 13.4** The chemical composition of 3-T blade does not conform to relevant Indian Standard. This should be looked into.
- 13.5** No labeling plate indicating Year of manufacture, Power of prime mover, Specific fuel consumption, Rated speed of engine, Speed of cutting attachment, etc has been provided on the machine. This may be looked into for necessary corrective action.
- 13.6** **Technical Literature:**
Only owner's manual/shop manual is provided with the machine. Hence, parts catalogue should also be provided with the machine to be referred by the operators or other field personnel when required.
It is recommended to bring out the manuals also in Hindi and other vernacular languages as per IS: 8132-1999.

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14. APPLICANTS COMMENTS

Sr. No.	Our Reference	Applicant's comments	Our Justification
1.	---	KisanKraft has to be changed in whole report (Both K should be in capital latter)	Incorporated
2.	Page No. 14 Sr.No. 11	The contents in Sr. No. 11 may be reduced in the interest of the buyer.	This is general observation and cannot be reduced/ removed.
3.	Page No. 9 Sr.No. 4.11.1	Material of 3 teeth blade may be written as forged mild steel	Incorporated

TESTING AUTHORITY

SANJAY KUMAR AGRIL. ENGINEER	
M. K. VISHWAKARMA DIRECTOR	

Test conducted and data compiled by-

Shri P.C. Dihingia, Assistant Agril. Engineer

Shri Anshul Pandey, Senior Technical Assistant(Ins