

व्यावसायिक परीक्षण रिपोर्ट
COMMERCIAL TEST REPORT

संख्या / No. : Equip.19/183
माह / Month: July, 2013



KisanKraft Power Weeder/Brush Cutter KK-BC-8634



सत्यमेव जयते

भारत सरकार
GOVT OF INDIA

कृषि मन्त्रालय

MINISTRY OF AGRICULTURE

कृषि एवं सहकारिता विभाग

DEPARTMENT OF AGRICULTURE AND COOPERATION

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NORTH EASTERN REGION FARM MACHINERY TRAINING & TESTING INSTITUTE

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4. SPECIFICATIONS

4.1 General

Name of Machine	: Power weeder/Brush cutter
Type of Machine	: Power weeder/Brush cutter
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-8634
Country of origin	: China
Frame serial no.	: Not provided
Year of manufacture	: Not provided
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 work recommended	: To cut weeds

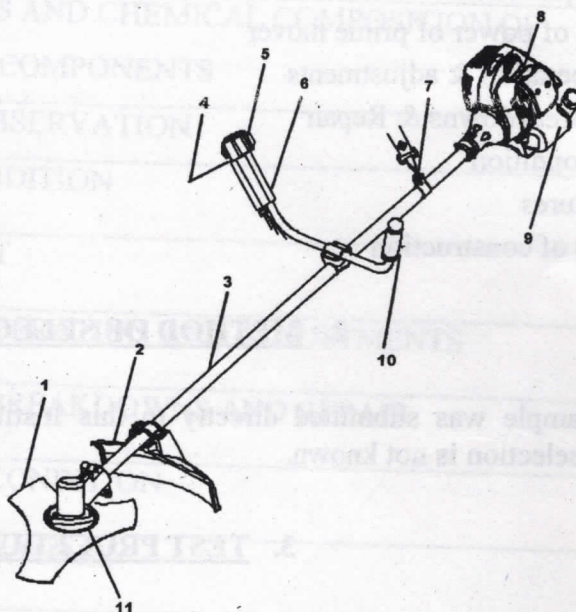


FIG. 1: Schematic view of Kisankraft (KK-BC-8634) Power Weeder/Brush Cutter

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 | |



13. EASE OF OPERATION & ADJUSTMENTS

Fatigue was observed just after 40 minutes of operation of the Power Weeder/Brush Cutter, mainly, due to excessive mechanical vibration and noise.

The operator complained about mild pain in different parts of his body like wrist, shoulder and right side thigh, etc during operation. Work-rest cycle for an average operator during grass/brush cutting with nylon rope and 3 teeth blade attachment was as follows:

40 minutes work → 10 minutes rest → 40 minutes work → 10 minutes rest → 30 minutes work → 10 minutes rest → 30 minutes work → so on.

14. DEFECTS, BREAKDOWNS AND REPAIR

No any breakdowns were occurred during 20.7 hours of field operation.

15. MACHINE CONDITION

The machine was submitted in good condition in all respects along with toolkit, extra blade, nylon rope, goggles/face protector and ear plugs.

16. SAFETY FEATURES

Grass shield is provided behind the cutter to restrict the cut material towards the operator and all other moving components are covered with suitable guards/ shields.

17. SOUNDNESS OF CONSTRUCTION

The construction of the machine was found in order.

18. COMMENTS & RECOMMENDATIONS

- 18.1 **Noise at Operator's ear level and bystander's level** was observed as 107 dB(A) and 96 dB(A) which is **on higher side against warning and danger limits of 85 dB (A) and 90 dB (A)** 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.
- 18.2 The **amplitude of mechanical vibration** on various assemblies of the machine is observed **on higher side**. This calls for dampening down of vibration to improve the operational comfort and service life of components.
- 18.3 The capacity of fuel tank is only 0.65 liter, which does not appear to be adequate. This calls for necessary modification.

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- 18.4 During testing, only goggles/face protector and ear plugs were provided as protective devices. All the necessary protective accessories, as shown 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.
- 18.5 The chemical composition of 3-T blade does not conform to relevant Indian Standard. This should be looked into.
- 18.6 Labeling plate is not provided. It should be provided with the following information:- Power of prime mover, Specific fuel consumption, Rated speed of engine, Speed of cutting attachment, etc. on the machine. This may be looked into for necessary corrective action.
- 18.7 Output of the field performance should be looked into for further improvement.
- 18.8 **Technical Literature:**
The following literatures were provided for reference during testing:
 - User's manual
 - Parts catalogue
It is recommended to bring out the manuals in Hindi and other vernacular languages also as per IS: 8132-1999.

19. APPLICANT'S COMMENTS

The applicant has no comments on the machine.