



# **INSTRUCTION MANUAL**

## **K44 SERIES**

### **Poly Rotor Harrows**



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**ABN: 34 486 499 532**

**74 Young Road (PO Box 340) COWRA NSW 2794**

Phone: 02 6340 0400    Toll Free Phone: 1800 194 131    Fax: (02) 6342 6913

# **WARNING!!!**

## **SAFETY PRECAUTIONS**



### **FAILURE TO OBSERVE THE FOLLOWING INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH**

It is the responsibility of the user to:

- Maintain in as new condition all warning and safety signs and devices at all times.
- Consult electricity authorities and all relevant energy companies to determine safe working distances from overhead power lines etc BEFORE operation of the machine.  
**POWER LINES CAN ARC AND ELECTROCUTE WITHOUT COMING IN CONTACT!!!**
- Ensure all operators are familiar with this manual and all safety devices and features of the machine.
- Take every reasonable precaution as is commonly expected in this industry and in the operation of the machine.
- Maintain the machine at all times in a condition that is safe to operate, and ensure it complies with any relevant safety acts of parliament, government authorities and regulations.
- Before mounting, check with manufacturer of machine or consult engineer to ensure strength and balance of machine is adequate to accommodate the K-Line products you have purchased.
- ***Must conduct a risk assessment, taking all risks into consideration before commissioning machine for use.***

## Dear Customer

Thank you for purchasing a K44 Series Poly Rotor. We would like to assure you that you have made a good choice, and will be able to rely on this high quality piece of equipment. We ask you to follow the user's instructions closely, as this will ensure that you experience the benefits of using the machine without experiencing the unnecessary down time caused by misuse.

The return of the **Warranty Registration Form** will enable a prompt and efficient identification of your K44 Series Poly Rotor and attention to any concern you may have.

## IDENTIFYING THE MACHINE FOR REQUESTING SPARE PARTS

The machine is identified by the serial number on the metal plate on the machine. When requesting spare parts or maintenance service, please indicate the model and number of your equipment to ensure prompt and efficient attention.

## AVAILABILITY OF GENUINE PARTS

*K-LINE* spare parts and accessories have been specifically designed and developed for the machines produced. We would call your attention to the fact that non-genuine parts and accessories are not recommended by *K-LINE*. The use of such replacement parts frees *K-LINE* from all liability and makes the warranty void. The installation and/or use of non-genuine parts may, because of technical characteristics of construction, modify or influence the performance of the machine negatively.

## AFTER DELIVERY

When you receive the machine, make sure that it has not been damaged during transportation and that no parts are missing. Only by giving us immediate advice can the necessary replacement parts be obtained. Ensure that all components are correctly adjusted.

# INSTRUCTIONS FOR SAFE OPERATION

This Instruction Manual must be read and understood by all personnel who use, adjust or maintain the K44 Series Poly Rotors.

**This Instruction Manual must be supplied and explained to all users. At all times observe Work Health and Safety Regulations and *Workcover* Regulations.**

1. BE SURE tractor drawbar pin is locked securely in place.
2. DO NOT operate unit while people are within 50 metres.
3. KEEP CLEAR of machine when in working & lifted position – **AT ALL TIMES.**
4. All bolts, nuts & pins MUST be well secured.
5. DO NOT stand on or ride on machine.
6. NEVER get under or on top of machine when it is supported by implement jack

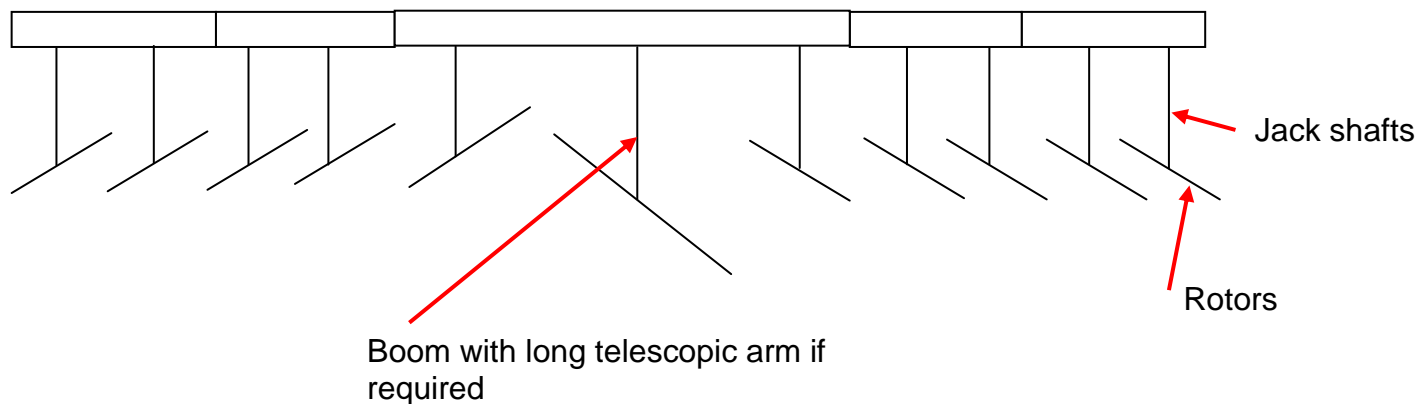
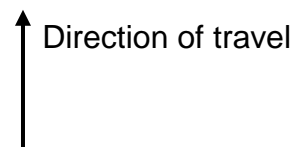
## SAFE WORK PROCEDURES

### FITTING INSTRUCTIONS FOR K44 POLY-TIPPED HARROWS

***A Risk Assessment must be carried out prior to assembly of these Harrows***

- Lower whole machine to ground on flat surface
- Place rotors in correct sequence behind machine and attach to
- Position boom in place and bolt to frame of machine with M16 x 100 U-bolts (finger tight).
- Lift rotor bow to rear of boom, secure in place with M12 x 65 U-bolt
- Boom mount position can be varied on bow to allow for variation in boom positions when attaching to machine.
- Check for cover (allow approx. 100mm) overlap
- Do all bolts up, check bolts in first 4 hours of use

## TYPICAL LAYOUT



### Rotor working covers (approx.)

K44PT4	1.25m
K44PT5	1.5m
K44PT6	1.83m

### To change aggression of harrows

- Loosen U-bolts attaching rotor bow to boom and move rotor to desired position.
- Tighten U-bolts

### To adjust tilt of rotor (i.e. depth front to back)

- Loosen retaining bolts between mounting bracket to boom
- Retighten.

# **WARNING**

**THE OPERATOR MUST ENSURE NO PERSONNEL ARE NEAR MACHINE WHEN LOWERING, RAISING OR OPERATING MACHINE.**

Eye protection (safety glasses or goggles), foot protection (safety boots) hand protection (gloves) and any other protective equipment must be worn when adjusting machine.

## **SAFETY INSPECTION & LUBE SERVICE**

**Conduct a lube service & safety inspection after first 4 hours of use & each 50 hours thereafter.**

- All pins (including lynch pins) are in place
- Check frame for fatigue & failure
- Ensure all appropriate safety decals are securely attached to machine
- Instruction manual is supplied.

### **CONDUCT A SAFETY CHECK DAILY.**

- Ensure all pins (including lynch pins) & bolts are securely fastened
- Check all safety decals & safety mechanisms
- Check frame for fatigue.

### **DECALS SUPPLIED WITH THIS MACHINE**

***TO REORDER FREE CALL 1800 194 131***

(Re-order codes below stickers)



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# RISK MANAGEMENT

Risk management is the process of finding out what may cause an injury, deciding what may happen as a result, and doing something about it.

The steps of risk management are:

- Identify the hazards to workplace health and safety arising from work activities
- Assess the risks
- Determine and implement control measures to reduce risk
- Monitor and review the effectiveness of the control measures

## IDENTIFYING HAZARDS

Prior to commencing work, all hazards related to the work tasks should be identified. The selection of the appropriate work procedure(s) will depend on the type of work procedure(s) and hazards involved.

Regular safety inspections will also identify hazards and ensure that control measures are in place.

## RISK ASSESSMENT

Risk assessment allows appropriate control measures to be developed. Once hazards have been identified, they should be assessed in terms of their potential to do harm. To assess risk, consideration should be given to probability and consequences. SEE RISK ASSESSMENT MODEL.

## RISK CONTROL

Risk control is the process of eliminating or reducing risk factors. Control measures should be chosen and implemented to eliminate or reduce risk as far as practicable. When deciding on the most appropriate measures to use, practicality and acceptance of the control measures should be considered. Safe Working Procedures will be developed for all high – medium risk hazards.

## MONITOR AND REVIEW CONTROL MEASURES

The risk identification, assessment and control process requires regular monitoring to ensure the implemented control measures perform as originally intended and continue to prevent or adequately control the risk of injury or incident.

Control measures should also be checked carefully to ensure that new hazards are not created, directly or indirectly, by the original control measures.

# RISK ASSESSMENT MODEL

How severely could it hurt someone? or How ill could it make someone?	How likely is it to be that bad?			
	Very likely could happen anytime	Likely could happen sometime	Unlikely could happen but very rarely	Very unlikely could happen but probably never will
<b>Kill or cause permanent disability or ill health</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>
<b>Long term illness or serious injury</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Medical attention and several days off work</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>First aid needed</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
The numbers show you how important it is to do something: 1: top priority: do something immediately 6: low priority: do something when possible				

**AT ALL TIMES COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF THE MANUFACTURER AND THE ENVIRONMENTAL PROTECTION AUTHORITY**



# K-LINE INDUSTRIES RISK ASSESSMENT

CODE	HAZARDS	RISK SCORE	CONTROL	REVISED RISK SCORE
1(A).	Crushing – when adjusting and cleaning, as machine may drop without warning	<b>1</b>	Adjusting & cleaning must only be done when machine is lowered or in transport position and only after all chains and bolts have been checked for tightness & wear in the lower position.	<b>5</b>
1(B).	Crushing - improper use of jack	<b>1</b>	Ensure jack is installed correctly & jack receives regular maintenance. Keep feet and body clear when operating.	<b>5</b>
1(C).	Crushing - when hitching tractor	<b>2</b>	Ensure no personnel are between tractor & harrow bar when hitching to tractor.	<b>5</b>
1(D).	Crushing - prior to priming hydraulic system, as machine may drop without warning	<b>1</b>	Machine must be lowered into working position using suitable lifting equipment before priming is effected by slightly loosening fitting/s into cylinders and operating tractor hydraulics to achieve full uninterrupted travel of cylinder several times. Then retighten hydraulic tine fittings.	<b>5</b>
1(E).	Sudden lift of drawbar causing severe injury, if machine becomes unhitched	<b>1</b>	Ensure all three jacks are correctly positioned and taking weight before removing drawbar pin. Stickers warn operator.	<b>5</b>
2(A).	Penetration of oil - broken or badly maintained hydraulic lines	<b>2</b>	Maintain regular checks on hydraulic system for wear & check all fittings are secure.	<b>5</b>
2(B).	Rupture of oil lines by over pressure when machine comes to sudden stop before fully lowered to working position	<b>2</b>	Ensure tractor oil flow is limited to reduce falling speed or do not interrupt machine falling until machine is fully in lowered position	<b>5</b>
3.	Collision – hydraulics accidentally lowered when machine is being operated in transport	<b>1</b>	Safety pins must be put in place as soon as machine is put in transport position and if travelling on public roads to disconnect hydraulics from tractor.	<b>5</b>

**ALL HAZARDS AND RISKS ARE CONTROLLED THROUGH SAFE WORKING PROCEDURES AND ADEQUATE SIGNAGE**

# WARRANTY

K-LINE INDUSTRIES have been known over the last 14 years for supplying an ever expanding range of quality agricultural machinery.

K-LINE INDUSTRIES warrants the products it manufactures and distributes to be free of defective materials and workmanship for a period of twelve months from date of purchase, to the first owner.

Any part of the goods manufactured and distributed by K-LINE INDUSTRIES that proves to be defective material, will be replaced or repaired by K-LINE INDUSTRIES when returned to K-LINE INDUSTRIES at cost to purchaser and at purchaser's risk.

Goods sold shall only have the benefit of this warranty if the purchaser has complied with the manufacturer's instructions in relation to the maintenance and operation of the said goods. All conditions and warranties implied by Law or Statute are hereby expressly excluded and negated so far as legally permissible. K-LINE INDUSTRIES is not otherwise liable for any direct, indirect or consequential loss or damage howsoever arising or occurring, whether founded in tort, contract, statute or otherwise.

This warranty must be read as subject to the General Terms and Conditions and does not cover misuse, neglect or negligence.

ANY CLAIM FOR WARRANTY IS ALSO SUBJECT TO THE FOLLOWING CONDITIONS:

- Equipment must be handled, assembled, operated, maintained and stored correctly and in accordance with the manufacturer's instructions by competent personnel.
- Warranty registration form must be signed by reseller and purchaser and returned to K-LINE INDUSTRIES within 14 days of invoice.
- Normal wear and tear, routine maintenance costs and accidental damage are NOT covered by this warranty.
- Any alteration of equipment or negligence in maintenance renders this warranty null and void.

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Signed on behalf of K-LINE INDUSTRIES

# PRE-DELIVERY CHECKLIST

- Conduct comprehensive risk assessment of machine with consideration for use and maintenance
- Ensure machine is delivered as per purchase order including options
- All pins and lynch pins are in place
- Hydraulic system is primed and operating properly (if applicable).
- Check gearboxes for oil (if applicable).
- Check belts for tightness (if applicable).
- Instruction manual is supplied and explained.

## It is the responsibility of the purchaser to:

- Maintain in as new condition all warning and safety signs and devices at all times.
- Ensure all operators are familiar with this manual and all safety devices and features of the machine.
- Take every reasonable precaution as is commonly expected in this industry and in the operation of the machine.
- Maintain the machine at all times in a condition that is safe to operate, and ensure it complies with any relevant safety acts of parliament, government authorities and regulations.
- Before mounting, check with manufacturer of machine or consult engineer to ensure strength and balance of machine is adequate to accommodate the K-Line products you have purchased.
- ***You must conduct a risk assessment, taking all risks into consideration before commissioning machine for use.***

Reseller		Client	
ADDRESS:		ADDRESS:	
PHONE:		PHONE:	
SIGNED:		SIGNED:	
MACHINE MAKE & TYPE:		SERIAL NO:	
DATE OF INVOICE:		INVOICE NO:	

To confirm registration for warranty, please fax this page (signed) to **(02) 6342 6913**.  
**Thank you.**

***DESIGNERS AND  
MANUFACTURERS  
OF QUALITY  
AGRICULTURAL  
MACHINERY***

***TOLL FREE PHONE NUMBER: 1800 194 131***



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