



OPERATORS MANUAL

&

WARRANTY FORM

Gavhall Pty Ltd, trading as KANGA FARM EQUIPMENT, would like to thank you for choosing one of our implements. Kanga Farm Equipment has manufactured three point linkage implements to handle the harsh Australian Conditions, since 1982.

All new Kanga Farm Equipment Implements are backed with a 12 month comprehensive warranty, against faulty workmanship and/or materials, under normal working conditions and service, as outline in this manual. Your warranty maybe considered void if any damaged to the implement is caused by operator abuse, neglect, or if any unauthorized modifications have been made.

Kanga Farm Equipment and its Distributors/Dealers are not responsible for any transportation cost incurred in the repair or replacement of parts in either a successful or non-successful warranty claim. All implements must be returned to the manufacture for warranty assessment.

This warranty does not exclude any conditions implied by the Trade Practices Act 1974, or any other relevant legislation.

*The information contained in this manual was current at the time of printing and has been compiled especially to assist you with the Implement that you have purchased. It is of the utmost importance that you read this manual, understand the context and **carry out a risk assessment** before operating the implement.*

Please be aware that in an effort to bring you better products we are always implementing continuous improvements that may change the designs and specifications of the Implement. In doing this, Kanga Farm Equipment together with its Dealers and Distributors are under no obligation to implement these changes, free of charge, on any previously delivered Implement

TO THE DEALER

Assembly and proper installation of this product is the responsibility of the KANGA FARM EQUIPMENT dealer. The dealer must complete all items on the Warranty Registration & Installation Form included in this manual before releasing the implement to the new owner.

Both dealer and customer must sign the registration, which certifies that all Dealer Checklist items have been completed. The dealer must return a copy of the Warranty Registration & Installation Form to Kanga Farm Equipment. Reminders about Warranty Registration that have not been returned will be sent out to demonstrate that reasonable attempts have been made to ensure dealers complete risk assessment and pre-delivery obligations.

TO THE OWNER

Read this manual before operating your KANGA FARM EQUIPMENT implement. The information presented will prepare you to do a much better and safer job. Keep this manual handy as a reference. Ensure you carry out and keep up to date a Risk Assessment and that all operators read the manual carefully and become acquainted with the adjustments and operating procedures before attempting to operate. Keep a record of the risk assessment and that the operator has read and understands the correct operating procedures as outlined in this manual.

The implement you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require routine cleaning, upkeep and maintenance. Lubricate the implement as specified. Observe all safety information in this manual and safety decals on the implement.

Throughout this manual the term **IMPORTANT** is used to indicate that a failure to observe can cause damage to the equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol (triangle with an exclamation mark) to indicate the degree of risk to your personal safety.



This Safety-Alert Symbol indicates a hazard and means ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED!



DANGER indicates an imminently hazardous situation, which if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

GENERAL INFORMATION

The purpose of this manual is to assist you in operating and maintaining your KANGA implement. Read it carefully. It provides information and instructions that will help you achieve years of dependable performance. These instructions have been compiled from extensive field experience and engineering data. Some information may be general in nature due to the unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing, but in an effort to bring you better products we are always implementing continuous improvements that may vary your implement slightly in detail. We reserve the right to redesign and change the machine as may be necessary without notice.



Some illustrations in this manual show the Digger with Safety Shields removed to provide a better view. The Slasher should never be operated with any safety shielding removed.

Throughout this manual, references are made to right and left direction. These are determined by standing behind the equipment facing the direction of forward travel. Blade rotation is as if viewed from the top.

TABLE OF CONTENTS

Introduction	Front & 2
General Information	2
Post Hole Diggers	5
Specifications	6 - 7
Safety Rules	8 - 9
Safety Decals	10
Operation	11 - 14
Operating Technique	12 - 14
Daily Operators Checklist	15
Owner Servicing	15 - 17
Replacing Teeth & Pilot	17
Trouble Shooting	17 - 18
Assembly Instructions	18 - 20
Power Take Off Shaft (PTO)	21 - 23
Clutch	24
Gearbox Information	25 - 26
OH & S Compliance Certification	27
Box Scrapers	28
Specifications	29
Safety Rules	30 - 31
Safety Decals	31
Operation	32 - 33
Daily Operators Checklist	34
Maintenance	34
Assembly Instructions	35
OH & S Compliance Certification	36
Carryalls, Jib Crane and Bale Handling Equipment	37
Specifications	38 - 39
Safety Decals	39
Safety Rules	40 - 41
Operation	42 - 44
Maintenance	44
Assembly Instructions	45
Daily Operators Checklist	45
OH & S Compliance Certification	46
Cultivators (Eurotiller / "S" Tine / Chisel Plough)	47
Specifications	48
Safety Rules	49 - 50
Safety Decals	51
Operation	52 - 53
Daily Operators Checklist	53
Maintenance	54
Assembly Instructions	54
OH & S Compliance Certification	55

Pallet Forks	56
Specifications	57
Safety Rules	58 - 59
Safety Decals	60
Operation	60 - 62
Daily Operators Checklist	62
Maintenance	63
Assembly Instructions	63
OH & S Compliance Certification	64
Rippers	65
Specifications	66 - 67
Safety Rules	68 - 69
Safety Decals	70
Operation	71 - 72
Daily Operators Checklist	72
Maintenance	73
Assembly Instructions	74
OH & S Compliance Certification	75
Stick Rakes	76
Specifications	77
Safety Decals	77
Safety Rules	78 - 79
Operation	80 - 81
Daily Operators Checklist	81
Maintenance	82
Assembly Instructions	82
OH & S Compliance Certification	83
Harrows	84
Specifications	85
Safety Decals	85
Safety Rules	86 - 87
Operation	88 - 89
Daily Operators Checklist	90
Maintenance	90
Assembly Instructions	90
OH & S Compliance Certification	91
Dealer' Pre-Delivery Checklist	92
Warranty Registration and Installation Form	93



HARROWS

SPECIFICATIONS

Drag Harrows

Frame Material	Channel			
Harrow Material	12mm Round			
Scarifier Section	Four Row Diamond Shaped			
Smudger Section	Four Row Square Shaped with rear weights			
Overall Width	1800mm	2400mm
Approximate Weight	124 kg	156kg
Min. Horsepower Requirement	2hp per 300mm			3000mm

Harrow Rake

Frame Material	Pipe
Harrow Material	Cast Iron
Working Width	4000mm
Transport Width	2000mm
Approximate Weight	260 kg

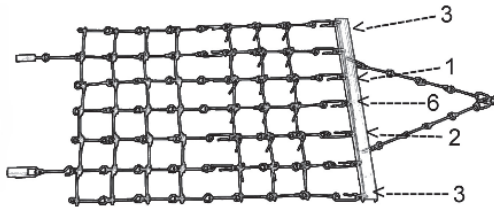
SAFETY RULES & ACCIDENT PREVENTION



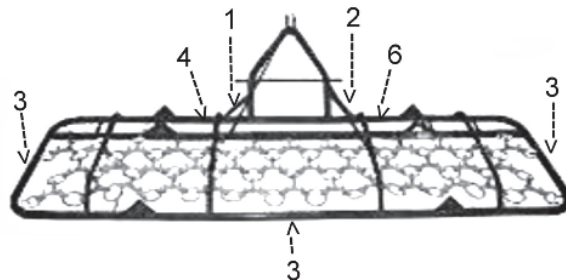
ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED!



Drag Harrows



Harrow Rake



1 – Serial Number Plate



2 – Kanga Logo



4 – Safety Decal K0001



3 – Safety Decal K0002



6 – Safety Decal K0003



7 – Safety Decal K0004



SAFETY RULES & ACCIDENT PREVENTION



ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED!



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said, *“The best safety devise is an informed careful operator.”* We ask you to be that kind of operator.

- **Customers MUST carry their own Risk Assessment and/or “HazCheck” on every implement on their property.**
- **Safety instructions are important! Read all attachments and unit manuals; follow all safety rules and safety decal information. Failure to follow instructions can result in serious injury or death.**
- **If you do not understand any part of this manual and need assistance the Department of Agriculture, Occupational Health & Safety Offices, any Agricultural School or college and your local dealer should be able to direct you on where you can receive appropriate training. No operator however experienced in farm machinery operation they maybe, should attempt to use any piece of machinery that they have not been competently trained to use.**
- **Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts to check for leaks. Wear safety goggles. Hydraulic fluid (oil) under pressure can easily penetrate the skin and will cause serious injury or death.**
- **Make sure that all operating and service personnel know that if hydraulic fluid (oil) penetrates the skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury or death will result. CONTACT A PHYSICAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**
- **Know your controls and how to stop quickly in an emergency.**
- **Operators must be instructed in and be capable of the safe operation of the equipment and all controls. Do not allow anyone to operate this equipment without proper instruction.**
- **Do not allow children or untrained persons to operate equipment.**
- **Check that all hardware is tight and properly installed.**
- **Always wear relatively tight fitted clothing to avoid entanglement in moving parts. Wear heavy-duty, rough-soled boots and protective equipment for eyes, hair, hands, hearing and head.**
- **Ensure implement is properly attached, adjusted and in a good condition so that it can be operate safely.**
- **Tractors MUST be fitted with Roll Over Protection Structure (ROBS) or ROBS Cap. It is also advisable that your tractor be fitted with a seatbelt, where fitted it must be worn at all times. Falling from your tractor can result in death from being run over or crushed. If your tractor is fitted with a folding ROBS, keep it in the “locked up” position at all times.**
- **Inspect chains, shackles, deflectors and any wear parts for damage. Replace if damaged.**
- **Remove any debris that has accumulated on the implement, tractor or engine to avoid fire hazard.**
- **Ensure all safety decals are installed. Replace if damaged.**
- **A minimum 20% of tractor and equipment weight must be on the tractor’s front wheels with implement in the transport position. Without this weight, tractor could tip over causing personal injury or death. The weight maybe attained with a loader, front wheel weights, and ballast in the tires or front tractor weights. When attaining the minimum 20% weight on the front wheels, you must not exceed the ROPS max ballasted mass certificate. Weight the tractor and implement. Do not estimate.**
- **Watch for hidden hazards on the terrain during operation and avoid any hazards or object that could cause injury or damage.**
- **Inspect operating area, remove where possible any stones, branches or foreign objects that may cause injury or damage. It is very important to always watch for foreign objects in the area you are operating and avoid any that could cause injury or damage.**

- When working in populated areas always place signs in the area to alert people or vehicles that may pass. Operation must be stopped when anyone comes within 50 meters.
- Keep all people and animals away from the implement during start up, operating and when stopping.
- Do not operate the implement or tractor while under the influence of drugs or alcohol.
- Operate only in daylight or good artificial light.
- Keep hands, feet, hair, and clothing away from moving parts while engine is running.
- Do not carry persons or objects on the Implement or tractor during work or while in transit.
- For transportation on public roads the operator must ensure that the tractor and implement complies with current State and Federal laws and must strictly adhere to all road traffic regulations in force in his/her particular state.
- Always operate equipment from the seat of the tractor with the seat belt securely fastened especially when operating controls or starting engine. Place transmission in neutral, engage break and ensure all other controls are disengaged before starting tractor engine.
- Look down and to the rear and make sure area is clear and safe before operating in reverse.
- Do not operate on steep slopes. If in doubt set rear axles wider for moderate slopes.
- Do not stop, start or change directions suddenly on slopes', working up and down is preferred.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Stop implement, then tractor, immediately upon striking an obstruction. Turn off engine, remove key, inspect and repair any damage before resuming operations. Always block implement when inspecting.
- Before commencing any adjustment, maintenance, or cleaning. Always switch off the tractor engine, remove key and wait until all moving parts have come to a complete stop, then ensure the machine is on the ground or on a robust secure support.
- Before dismounting tractor or performing any service or maintenance lower the 3-point linkage and any other raised components (i.e. loader bucket) to the ground. Operate valve levers to release any hydraulic pressure, stop engine, set parking brake, remove key and unfasten seat belt.
- Never place any part of the body underneath the implement or between moveable parts even when engine has been turned off. Hydraulic systems can "creep" (i.e. slowly lower). They may fail or movement of the control levers can cause the implement to drop or rotate unexpectedly causing severe injury or death. Follow Operator's Manual instructions for working on your implement or have servicing carried out by a qualified dealer.
- During routine checks and/or repairs ensure that no one can switch on the tractor or Implement accidentally. Keep the key to the tractor in your pocket.
- For your own safety and that of others and to avoid forfeiting your warranty, use only original spare parts.
- Do not modify/alter or permit anyone else to modify/alter the implement or any of its components.
- Ensure implement is properly attached, adjusted and in good operating condition.
- Frequently check cutting edge blade. It should be free of nicks and cracks and securely fastened.
- Do not handle cutting edge blades with bare hands. Careless or improper handling may result in serious injury.
- Always use genuine Kanga cutting edges. Your dealer can supply you with genuine replacement parts.
- Firmly tighten all nuts, bolts, screws and shackles before operating. If worn or damaged then replace immediately.
- Block implements securely for storage.
- Keep children and bystanders away from storage area.
- Kanga Farm Equipment accepts no responsibility or liability for any losses, injuries or damages that may result from failing to observe these safety rules and the safety decals on the implement.

OPERATION

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

It has been said, *“The best safety devise is an informed careful operator.”* We ask you to be that kind of operator.

The operator is responsible for the safe operation of this implement. The Operator must be properly trained. Operators should be familiar with the implement and tractor and all safety practices before starting operation. Read the safety rules and safety decal information on pages 85, 86 & 87.

This equipment is designed for applications like breaking up and/or smudging of manure, smoothing out and leveling freshly cultivated soil, working seed and fertilizer into the ground, leveling/grooming of dirt tracks and de-thatching and aeration of grass.

- Always ensure “Mounted” harrows are fully raised when transporting or travelling between work sites.
- Do not drag on paved or concrete surfaces. Load into a trailer and secure for transport on roads and highways.
- Before you begin operation you should visually survey the site you are to be working on ensuring it is free of foreign objects. At this time you should also mark all irrigation heads, utility outlets and any other objects that cannot be moved that could cause damage or injury if not avoided. Measure entry and exit points and make sure there is enough clearance for the harrows to pass safely through the gap.
- Always operate at a safe speed for your environment and reduce speed when cornering. Do not drag at high speed and remember the slower you travel the finer the finish
- Always leave enough clearance around fixed obstacles like posts, fences, trees, buildings, etc.
- When using drag harrows always ensure you can drive forward away from the harrows. Never backup over the harrows as the spikes will damage your tires.
- Kanga Drag Harrows can be used with some fertilizer spreaders

WARNING

- **Do not allow children or untrained persons to operate this implement**
- **Keep all people and animals away from the implement during start up, operating and when stopping.**
- **Never place any part of the body underneath the implement or between moveable parts even when engine has been turned off. Hydraulic systems can “creep” (i.e. slowly lower). They can fail or movement of the control levers can cause the implement to drop unexpectedly causing severe injury or death. Follow Operator’s Manual instructions for working on your implement or have serviced by a qualified dealer.**
- **Service work does not require going underneath this implement. Read Operators Manual for service instructions or have work carried out by a qualified dealer.**

DANGER

- **When operating along roads, pathways or highly populated areas always place signs in the area to alert people or vehicles that may be passing. Operation must be stopped when anyone comes within 50 meters.**
- **Stop implement, then tractor, immediately upon striking an obstruction. Turn off engine, remove key, inspect and repair any damage before resuming operations.**
- **A minimum 20% of tractor and equipment weight must be on the tractor’s front wheels with implement in transport position. Without this weight, tractor could tip over causing personal injury or death. The weight maybe attained with a loader, front wheel weights, and ballast in the tires or front tractor weights. When attaining the minimum 20% weight on the front wheels, you must not exceed the ROPS max ballasted mass certificate. Weight the tractor and implement. Do not estimate.**

ATTACHING TO THE IMPLEMENT

Drag Harrows – Insert the bull rings through the tractors hitch or draw bar and fix into place with a clevis pin OR if the hitch has been replaced with a tow hook, slip the bull rings over the tow hook. **NT** – Clevis Pin not supplied with this unit.

Harrow Rake - Remove tractor draw bar to eliminate interference with the implement. Attach the implement with the hitch pins supplied to the lower link arms of the tractor and secure with lynch pins. Attach tractor top link to implement top clevis with top hitch pin and secure with lynch pin.

WARNING

- **When connecting the tractor to the implement never stand in between the tractor and the implement and always find somewhere level or flat.**
- **Always adjust the tractor lower linkage arms anti-sway devices to prevent implement from swing from side to side during transport and operation. Failure to do so may result in serious injury or damage. Damage like bent and twisted implement towers are **NOT** covered by warranty.**
- **Before dismantling tractor or performing any service or maintenance lower the 3-point linkage and any other raised components (i.e. loader bucket) to the ground. Operate valve levers to release any hydraulic pressure, stop engine, set parking brake, remove key and unfasten seat belt (if fitted).**
- **During routine checks and/or repairs and changing implement settings, ensure that no one can switch on the tractor or Implement accidentally. Keep the key to the tractor in your pocket.**

There are no adjustments on Harrow Rakes. They should be delivered to the purchaser assembled. After 2 hours of use the customer is advised to check all links to ensure they have not stretched and check hardware (nuts, bolts, etc) are fastened.

Drag Harrows are made up of three main sections (tool bar, “Scarifier” harrows and “Smudger” harrows. The Tool bar and “Smudger” Section (rear section) should always be the same at when the machine is delivered by your dealer. The “Scarifier” section can be adjusted depending on how aggressive you want to be. To adjust the “aggressiveness” you can either turn the harrows around or turn them over.

With the Bull Rings of the “Scarifier” section attached closest to the tool bar the harrow will be the most aggressive. With the Bull Rings connected to the “Smudger” Section it will be less aggressive and if you turn the “Scarifier” section over, then the harrows will be pointing you and the harrow will become a large “Smudger.”

For further information do not hesitate to contact us.

IMPORTANT

- **Vibration tends to loosen bolts during operation. All hardware should be checked regularly. It is good practice to check implement before each operation to ensure all hardware is secure.**

WARNING

- **Do not operate on steep slopes**
- **Do not stop, start or change directions suddenly on slopes.**
- **Use extreme care and reduce ground speed on slopes and rough terrain.**
- **Watch for hidden hazards on the terrain during operation.**
- **Pass diagonally through sharp dips and avoid sharp drops.**

Removing Implement from Tractor and Storage

Harrow Rake - Lower implement all the way to the ground. Turn off tractor ignition and remove key. Firmly apply park break, remove seatbelt (if fitted) and dismount the tractor. Block implement securely for storage with robust secure support, remove lower linkage pins. Slowly move tractor away from implement checking that implement will not fall from blocking.

Drag Harrows – Back up slightly to remove the tension on the drag chain links. Remove Clevis pin and bull rings.

STORAGE

It is advised to park Harrows on a hard gravel or concrete surface where it remains visible and weeds and grass cannot grow up through it. A Harrow set in deep weeds or grass can be difficult to find and hazardous to machinery, people and livestock walking or operating in the area. Drag Harrows can be stored rolled up.

Daily Pre-Operation Checklist

(Operators Responsibility)

- Operators MUST carry out a Risk Assessment and/or “HazCheck” for the implement and ensure it is correct for the conditions the implement will be operating.
- Review and follow safety rules outlined in this manual
- Check that implement is properly and securely attached to the tractor
- Check all hardware (i.e. bolts, nuts, shackles, chains, etc) are properly installed, secured and in good working condition. Check the “links” of the harrows and ensure any that may have stretched are repaired before continuing.
- Check harrows are not tangled and weights are attached.
- Ensure tractor transmission is in neutral before starting engine.
- Inspect area that you will be operating in and remove any foreign objects that may cause injury or damage.

MAINTENANCE, BLOCKING METHOD AND ASSEMBLY

WARNING

- **Before dismantling tractor or performing any service or maintenance disengages power to implement, lower the 3-point linkage and any other raised components (i.e. loader bucket) to the ground. Operate valve levers to release any hydraulic pressure, stop engine, set parking brake, remove key and unfasten seat belt.**
- **Never place any part of the body underneath the implement or between moveable parts even when engine has been turned off. Hydraulic systems can “creep” (i.e. slowly lower). They can fail or movement of the control levers can cause the implement to drop or rotate unexpectedly causing severe injury or death. Follow Operator’s Manual instructions for working on your implement or have servicing carried out by a qualified dealer.**
- **During routine checks and/or repairs, ensure that no one can switch on the tractor or Implement accidentally. Keep the key to the tractor in your pocket.**
- **Service work does not require going underneath this implement. Read Operators Manual for service instructions or have servicing carried out by a qualified dealer.**
- **Always wear relatively tight fitted clothing to avoid entanglement in moving parts. Wear heavy-duty, rough-soled boots and protective equipment for eyes, hair, hands, hearing and head.**

Maintenance

- Check all hardware (i.e. bolts, nuts, shackles, chains, etc.) are properly installed, secured and in good working condition. Check the “links” of the harrows and ensure any that may have stretched are repaired before continuing.
- Check harrows are not tangled and weights are attached.
- Harrow Rake – Grease and maintain the pivot points of the folding wings

Blocking Method

To minimize the potential hazards of working underneath the implement, these procedures must be followed.

- Jack stands with a load rating of 500kg or more are the only approved blocking devices for this implement. Do not position jack stands under wheels, axles or wheel supports as components can rotate and cause implement to fall.
- When blocking, you must consider the overall stability of the implement. Just placing jack stands under the unit will not ensure your safety.
- The working surface must be level and solid to support the weight of the jack stands. Ensure jack stands are stable both top and bottom, and implement is approximately level. With full implement weight lowered onto jack stands, test blocking stability before working underneath implement.
- Implement should be properly and securely attached to the tractor (see operating section), the brake firmly set, key removed and both front and rear tractor wheels securely blocked.

Assembly Instructions

Assembly of this implement is the responsibility of the KANGA FARM EQUIPMENT dealer. It should be delivered to the new owner completely assembled, lubricated and adjusted for normal conditions.

1/ Lay frame on the Ground and unfold the harrows out so they are flat.

2/ Connect the harrows to the frame by either hooking the S hooks into the links on the frame (Drag Harrows) or hooking the Bull Rings over the lugs on the frame (Harrow Rake).

NT. Drag Harrows have two types of harrows, the aggressive “Scarifier” section and the “Smudger” section. The “Scarifier” section should be at the front and closest to the frame, while the “Smudger” section is the trailing section with rear weights attached.

Agricultural Machinery Product OHS Compliance Form

We, Gavhall Pty Ltd t/as Kanga Farm Equipment
 Of, 16 Cahill Street
 Dandenong, Victoria, Australia, 3175
 Telephone: 03-9706-5166
 Fax: 03-9706-5050

Confirm that the following machine(s)

Kanga Drag Harrow(s)
 Kanga Harrow Rake

have had a hazard identification, risk assessment and risk control procedure carried out on a representative model of the aforementioned product(s) in accordance with the Occupational Health and Safety requirements of all states and territories of Australia and where found necessary the appropriate risk control measures have been incorporated in the product specifications.

The Operators Manual contains the necessary Health and Safety information and safety warnings decals are applied to the product where necessary.

Product Description: Harrows

Model Number(s): Drag Harrows – Product Code(s) 90080, 90100, 90120
 Harrow Rake – Product Code(s) 90500



Signature

Name: Bruce J. Alcott
 Position: Managing Director

Date: 10 / 10 / 2006

Details of the unit assessed for the purpose of compliance

Model #	Size	Serial #	Date of Inspection	Location
Drag Harrow	2.4m	001-Nov	19 / 11 / 2008	16 Cahill St, Dandenong
Harrow Rake	4.0m	002-Nov	19 / 11 / 2008	16 Cahill St, Dandenong

PRE-DELIVERY CHECKLIST (Dealers Responsibility)

Inspect implement thoroughly after assembly to be certain it is set up properly before delivering it to the customer. The following checklist is a reminder of points to inspect. Check off each item as it is found satisfactory either before or after corrections or services performed.

- Check all bolts and ensure that they are tight.
- Check all cotter pins and linkage pins and ensure they are properly installed and can be secured.
- Refer to lubrication instructions and lubricate implement.
- Explain the importance of lubrication to the customer and point out all the lubrication points on the implement.
- Check that any “wear points” (i.e. points, blades, edges, tines) have been properly installed.
- Show customer how to make adjustments. Describe the options available for the implement and explain their purpose and how they work.
- Ensure the stability of the tractor has not been compromised with the implement the customer has purchased. Remember a minimum 20% of tractor and equipment gross weight must be on the tractor’s front wheels with implement in the transport position. If you are adding weight to the tractor to attain the 20%, you must not exceed the ROPS max ballasted mass certificate. Weight the tractor and implement. Do not estimate.
- Give Operators Manual to the customer and recommend that customer become familiar with all sections, especially the safety and safe operating procedures.
- Explain to the customer that when transporting the implement on roads or highways, day or night, safety devices should be used to provide adequate warning to operators of other vehicles. Also explain the operator must ensure that the tractor and implement complies with current State and Federal laws and must strictly adhere to all road traffic regulations in force in his/her particular state.
- Check PTO series is correct and that the PTO is the correct length (**post hole diggers only**)
- Check gearbox is properly serviced and seals are in good condition and not leaking. (**post hole diggers only**)

▲ IMPORTANT

Gearbox was not filled with oil at the factory. It must be serviced before implement is operated. Failure to service will result in damage to the gearbox. You will find a level plug on the side of your gearbox or a guide to the amount of oil required can be found on the same page as the gearbox parts guide.

- Instruct the customer that they **MUST** carry out a Risk Assessment and/or HazCheck for the implement and the operating conditions.
- Ensure the customer has signed the **WARRANTY REGISTRATION & INSTALLATION FORM** and a copy has been returned to Kanga Farm Equipment, 16 Cahill Street, Dandenong, Victoria, 3175.

Name of person who carried out Pre-delivery: _____ Signature: _____

Dealership Name: _____ Location carried out: _____

Date: ___/___/_____

Top copy (manufacture’)

Middle Copy (dealer’)

Last page (purchaser’)



WARRANTY REGISTRATION & INSTALLATION FORM

Owners Name: _____
Town: _____ State: _____ P/Code: _____

Type of Implement Purchased

- Post Hole Digger Mini Range M Range H Range XH Range (50hp) XH Range (75hp)
Box Scraper 1200mm 1800mm 2400mm
Carryall 4' x 3' 5' x 3'6" 6' x 3'6"
Cultivator Eurotiller (5/7/9/11 Tine) S Tine (2.4m/2.8m/3.0m/3.2m) Chisel Plough (5/7/9/11 Tine)
Pallet Fork 500kg 1000kg
Bale Equip. Spike Silage Fork Adj. Bale Feed Out Fork
Ripper H Range 3 Tine M Range 3 Tine H Range Single Tine M Range Single Tine Mini Single Tine
Stick Rake 1800mm 2400mm 3000mm
Harrows 2400mm 3000mm 3600mm 4000mm (Harrow Rake)
Other (Please Specify) _____

Serial Number _____

Month of Manufactured: Jan Feb Mar Apr May Jun Jul Aug Sept Oct Nov Dec

Year of Manufacture _____ Date of Purchased ___/___/_____

Intended areas of use: Paddocks Only Close to Sheds & Buildings Near Roads

Contracting, please specify: _____

Other, please specify: _____

I have been fully instructed in the operation of this unit in the actual working conditions that I intended to operate and I am satisfied that I can use it safely. I acknowledge that I have been fully instructed in the care, maintenance, lubrication and that Kanga Implements have been designed for agricultural use in area away from people, animals, roads and property. I understand that there are Federal and State Laws as well as OH&S Standards that dictate how I can operate should I wish to operate along roads or in any populated areas and that it is my responsibility to know and adhere to those laws. I have received a copy of the operating manual and the dealer has instructed me to read the manual in full and carry out my own Risk Assessment before commencing any operations.

Owner's Signature _____ Date ___/___/_____

- FINAL ASSEMBLY - Checked all hardware to ensure it is firmly tightened as outlined in the Operators Manual. Customer has been instructed on how to make regular checks and tighten ALL hardware (i.e. all nuts and bolts).
LUBRICATION - The implement has been lubricated and oil levels have been checked in all chain/gearbox transmissions. Customer has been instructed on how to check oil levels and lubricate implement.
GREASING & MAINTENANCE - Grease bearings, universals and ensure PTO shaft has been. Instruct customer how to re-grease the implement. Explain to the operator the requirements and repercussions of regular maintenance.
CLUTCH ADJUSTMENT - Check that clutch has been correctly fitted and nuts are tight. Check the clutch has been adjusted for the customer's situation. Instruct customer that an annual service is required.
IMPLEMENT, DRIVESHAFT & TRACTOR COMPATIBILITY - Check implement and PTO compatibility, ensuring the PTO will not foul on the tractor or implement during linkage operation. If PTO was cut make sure that it was re-greased and all spring activated locking pins on the PTO Shaft move freely.
IMPLEMEMNT & TRACTOR COMPATIBILITY - Check implement and Tractor compatibility. Ensure that a minimum 20% of tractor and equipment weight is on the tractor's front wheels with implement in transport position.
OPERATION PROCEDURES - I instruct the operator on correct procedures and techniques for the type of work they have indicated they intend to carry out. General safe operating procedures can be found in the Operators Manual. Advise customer to carry out a risk assessment and hazard identification of the property and alert the customer to the type of potential dangers they should be looking to avoid.
DANGERS - Instruct customer on the potential dangers of operating the implement. Outline the dangers associated with rotating blades, the possibility of fast moving debris, rotating PTO Shaft and ensure the customer knows that information about safe operating procedures and maintenance are in this Manual
RISK ASSESSMENT - Ensure you instruct customer to complete a HazCheck for the implement and their operating conditions.
OWNERS/OPERATORS MANUAL - Check that the implement has a booklet supplied. Emphasize the importance of reading the Manual. Note manuals can be down loaded from www.farmimplements.com.au

Please tick the boxes above as each point has been carried out.

Dealership Name: _____ Pre-delivered By: _____
Salesperson's Name: _____ Salesperson's Signature: _____

Top copy (manufacture')

Middle Copy (dealer')

Last page (purchaser')