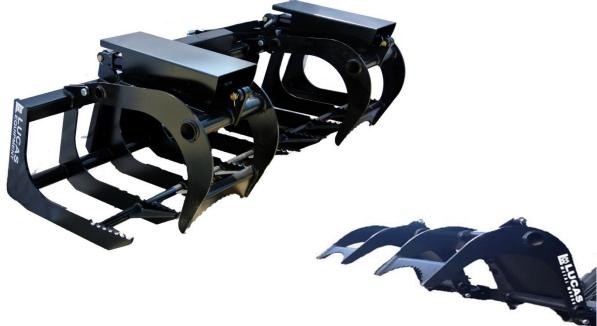


# Grapple & Add-A-Grapple

# **Operator's & Parts Manual**



396281 W 3000 Rd. Ochelata, OK 74051 918-535-2726/866-689-8904 Lucasmetalworks.com



Call for a Dealer Nearest You

## Lucas Metal Works Grapple & Add-A-Grapple Specifications

Operating Weight: 5' = 450lbs. (204kg) 6' = 500lbs. (226kg) 7' = 525lbs. (238kg)

Heavy-Duty Weight: 6' = 600lbs. (272kg) 7' = 625lbs. (284kg)

Maximum Opening = 33" (838mm) Inside Depth = 27" (686mm) Standard Grapple Rated up to 65 HP Heavy-Duty Grapple Rated up to 100 HP

Lucas Add-A-Grapple fits buckets = 60-96 inch bucket

All new LucasEquipment 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.

Lucas 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.



### To The Dealer

Assembly and proper installation of this product is the responsibility of the Lucas Equipment dealer.

### To The Consumer

Read this manual before operating your Lucas Equipment implement. The information presented will prepare you to do a much better and safer job. Keep this manual handy as a reference. Ensure all operators read the manual carefully and become acquainted with the 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 the is manual.

Throughout this manual there will be several terms to observe. Failure to adhere can cause damage to the equipment.



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 results 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 operation and maintaining your Lucas Equipment implement. Read it carefully. It provides information and instructions that will help you achieve years of dependable performance. These instructions have been compiled of extensive field experience and engineering data. Some information may be general in nature due to the unknown procedures suitable to your particular situation.

The illustrations and data used in this manual was 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.



## 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.

- Customers MUST carry their own Risk Assessment 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 equipment dealer should be able to direct you on where you can receive appropriate training. No operator however experienced in farm machinery operation, they may be, should attempt to use any piece of machinery that they have not been completely 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 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 EYE. 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, hearing and head.

SAFETY RULES & ACCIDENT PREVENTION



#### ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED!



LUCASEQUIPMENT

- Ensure implement is properly attached, adjusted and in good working order so that it can be operated safely.
- Falling from your tractor can result in death from being run over or crushed. If your tractor is fitted with a folding ROPS, keep it in the "locked up" position at all times.
- Inspect chains, shackles, deflectors and any parts for damage. Replace if damaged.
- Remove any debris that has accumulated on the implement, tractor or engine to avoid fire hazard.
- Watch for hidden hazards on the terrain during operation and avoid any hazards or objects that could cause injury or damage.
- Inspect operating area, remove 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 may cause injury or damage.
- Keep all people and animals away from the implement during start up, operating and stopping.
- Do not operate the implement under the influence of drugs or alcohol.
- 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 caution 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 operation. Always block implement when inspecting.
- Before commencing any adjustment, maintenance, or cleaning. Always switch tractor engine off, remove key and wait until all moving parts have come to a complete stop. Ensure machine is on the ground or on a securely supported base.

LUCASEQUIPMENT

## SAFETY RULES & ACCIDENT PREVENTION ATTENTION! BE CAREFUL! YOUR SAFETY IS INVOLVED!



- 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 Operators 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.
- For your own safety and that of others and to avoid forfeiting your warranty, use only original 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.
- Always use genuine Lucas 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 storage area.
- Lucas Equipment implements accepts no responsibility or liability for any losses, injuries or damages that may result from failing to observe these safety rules.



## **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.

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.



- Do not allow children or untrained persons to operate this implement.
- Keep all people and animals away from the implement during start up and when stopping.
- Keep all people away from the operator control area when performing adjustments, service or maintenance.
- 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 Operators Manual instructions for working on your implement or have servicing carried out by a qualified dealer.
- No passengers on this equipment.



When operating along roads, pathways or highly populated areas always place signs in the area to alert people or vehicles that my be passing.



- Stop implement, then tractor immediately upon striking an obstruction. Turn off engine, remove key, inspect and repair any damage before resuming operation. Always block implement when inspecting.
- Always wear relatively tight fitted clothing to avoid entanglement in moving parts. Wear heavy duty, rough-soled boots and protective equipment for eyes, hair, hearing and head.
- A minimum of 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 may be 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 ROBS max ballasted mass certificate. Weight the tractor and implement. Do not estimate.



### ATTACHING TO THE IMPLEMENT

## A WARNING

- When connecting the tractor to the implement never stand in between the tractor and the implement. Always find somewhere level or flat to stand.
- The implement you purchased should not be mounted on tractors greater than that specified in the "Specifications" section of this manual.
- Always adjust the tractor lower linkage arms anti-sway devices to prevent implement from swinging side to side during transport and operation. Failure to do so may result in injury or damage. Damage like bent and twisted implement towers are **NOT** covered by warranty.
- Before dismounting tractor or performing any service or maintenance lower the 3-point linkage and any other raised components to the ground. Operate valve levers to release any hydraulic pressure, stop engine, set parking brake, remove key and unfasten seat belt.
- During routine checks and/or repairs ensure that no one can switch on the tractor or implement accidently.

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 the lynch pins. Attach tractor top link to implement top clevis with top hitch pin and secure with lynch pins.

#### GENERAL OPERATING

#### 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.

Ensure the tractor is in the off position and all brakes are on. Attach the implement to the tractor using the lower link pins supplied and the top link pin on your tractor. Position the tractor so that the spears are roughly in the middle of the hay bale . Use the tractors lower linkage arms to raise the bale(s) off the ground. When using a rear loading tractor, slowly back into hay bale(s) until the spike is all the way through the bale and the bale is against the frame of the implement. When using a front loading tractor slowly drive into hay bale(s) until the spike is all the way through the bale is against the frame of the implement. Slowly lift the bale(s) off the ground. When lifting the bale(s) off the ground ensure the tractors front wheels are not lifting Off the ground. If the wheels are lifting, or the steering is considerably "lighter" speak to your dealer About front weights for your tractor to ensure you remain a safe operator. To unload bale(s) from spears, lower the linkage so the full weight of the bale(s) is on the ground and the spear is parallel to the ground and slowly drive away from bale(s).



#### REMOVING THE IMPLEMENT FROM THE TRACTOR

Use the tractor lower linkage arm control to lower the implement all the way to the ground. Turn off the ignition and remove the key. Firmly apply the parking brake, remove seatbelt and dismount the tractor. Block implement securely for storage with a secure support, remove lower linkage pins. Slowly move tractor away from implement checking that the implement will not fall.



#### MAINTENANCE

- Before dismounting the 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 movable 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.
- During routine checks and/or repairs ensure that no one can switch on the tractor or implement accidentally. Keep the key away from the ignition.
- Service work does not require going under the implement.

## A CAUTION

- Always wear relatively tight fitted clothing to avoid entanglement in moving parts. Wear heavy-duty boots and protective equipment for eyes, hands hearing and head.
- Check all hardware (i.e. bolts, nuts, lower link pins, etc.) are properly installed, secured and in good working condition. Should you find any signs of wear or damage replace immediately.
- Inspect implement for stress cracks caused from overloading. Repair before continuing operations.
- Check trip mechanism is well greased, free of rust and working correctly.
- Check buckets for damage and rust. Should you find areas of concern make sure they are repaired before continued use.



#### **BLOCKING METHOD**

## A WARNING

- Never place any part of the body underneath the implement or between movable 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.
- During routine checks and/or repairs ensure that no one can switch on the tractor or implement accidentally. Keep the key away from the ignition.
- Service work does not require going under the implement.

There are no reasons why you should be underneath the implement. Should you find an area that is in need of repair that would involve someone going under the implement, then detach implement from the tractor and perform service work. However, you may need to block the implement once it has been detached. 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 level. With full weight of the implement lowered on jack stands, test blocking stability before working underneath implement.