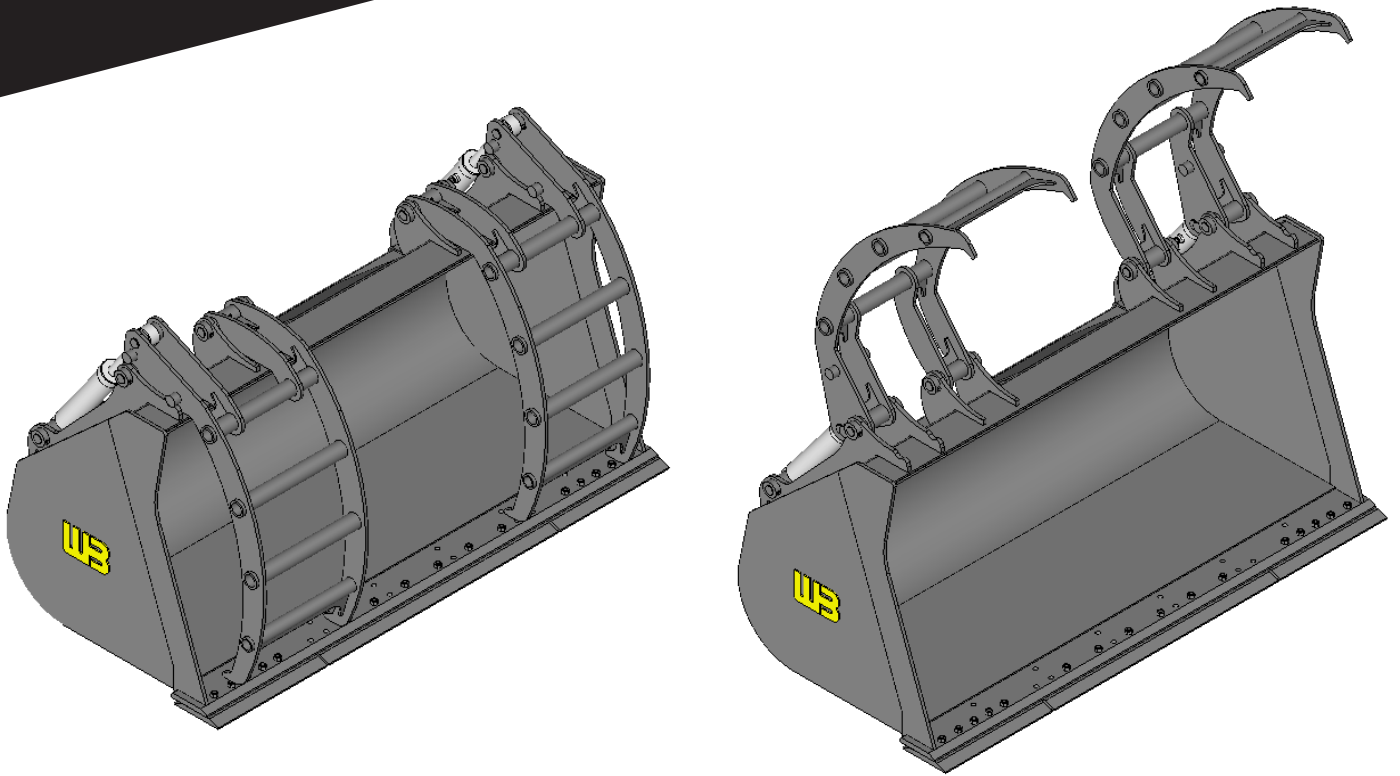


WERK-BRAU CO., INC. PRODUCT AND INSTALLATION MANUAL

WLGB

(Wheel Loader Grapple Bucket)



Serial No: _____

Model No: _____

Date Manufactured: _____

PROUDLY MANUFACTURED IN FINDLAY, OH
Werk-Brau.com



SAFETY STATEMENT GUIDE

DANGER

Danger tags are used in major hazard situations where an immediate hazard presents a threat of death or serious injury to operator and anyone about.

WARNING

Warning tags are used to represent a hazard level between “Caution” and “Danger”, instead of the required “Caution” tag, provided that they have a signal word of “Warning,” an appropriate major message.

CAUTION

Caution tags are used in minor hazard situations where a non-immediate or potential hazard or unsafe practice presents a lesser threat of injury.

NOTICE

A notice label is used where equipment or property damage could result if the instructions are not followed properly.



This symbol by itself or used with a safety signal word throughout this manual is used to call your attention to instructions involving your personal safety or the safety of others. Failure to follow these instructions can result in injury or death.

GENERAL SAFETY PRECAUTIONS

DANGER

READ MANUAL PRIOR TO INSTALLATION

Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual as well as all manuals related to this equipment and the operating machine thoroughly before beginning installation, operation, or maintenance. FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND THE OPERATING MACHINES MANUAL.

WARNING

READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing or operating this equipment.

DANGER

KNOW YOUR EQUIPMENT

Know your equipment’s capabilities, dimensions and operations before operating. Visually inspect your equipment before you start, and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to assure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean, and replace them if they become worn and hard to read.

NOTICE

PROTECT AGAINST FLYING DEBRIS

Always wear proper safety glasses, goggles with a face shield when driving pins in or out or when any operation causes dust, flying debris, or any other hazardous material.

WARNING

LOWER OR SUPPORT RAISED EQUIPMENT

Do not work under raised booms without supporting them. Do not use support material made of concrete blocks, logs, buckets, barrels or any other material that could suddenly collapse or shift positions. Make sure support material is solid, not decayed, warped, twisted, or tapered. Lower the boom(s) to ground level or onto block(s). Lower the boom(s) and attachment(s) to the ground before leaving the cab or operator’s station.

GENERAL SAFETY PRECAUTIONS

WARNING

USE CARE WITH HYDRAULIC FLUID PRESSURE

Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible. Before connecting or disconnecting hydraulic hoses, read your operating machines operator's manual for detailed instructions on connecting and disconnecting hydraulic hoses or fittings.

- Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities. Wear safety glasses, protective clothing, and use a sound piece of cardboard or wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS**
- If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research immediately to determine proper treatment.

WARNING

DO NOT MODIFY MACHINE OR ATTACHMENTS

Modifications may weaken the integrity of the attachment and may impair the function, safety, life and performance of the attachment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality. For loaders, never modify any ROPS (Roll Over Protection System) equipment or device.

!!!Any modifications must be authorized in writing by Werk-Brau or the manufacturer!!!

DANGER

NOTICE

SAFELY OPERATE THE EQUIPMENT

Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, know its capabilities, dimensions, and all safety requirements.

See your operating machines manual for these instructions.

- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Be sure that all bystanders are out of harms way when operating.
- Do not allow riders on the attachment or operating machine
- Do not operate the equipment from anywhere other than the correct operators position.
- Never leave equipment unattended with the engine running or with this attachment in a raised position.
- Do not alter or remove any safety feature from the operating machine or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.



SAFELY MAINTAIN AND REPAIR EQUIPMENT

- Do not wear loose clothing, or any accessories that can catch in moving parts. If you have long hair, cover or secure it so that it does not become entangled in the equipment.
- Work on a level surface in a well-lit area.
- Use properly grounded electrical outlets and tools.
- Use the correct tool for the job at hand. Make sure tools are in good condition.
- Wear all protective equipment specified by the tool manufacturer.

OPERATING PRECAUTIONS

⚠ WARNING

DO NOT IMPROPERLY USE THIS ATTACHMENT

This grip is designed to couple attachments and not for any other use.

⚠ DANGER

BE AWARE OF SURROUNDING UTILITIES

Operator must be aware of all utility line and overhead electrical lines. Operations must be able to clear all lines safely.

NOTICE

⚠ DANGER

BE AWARE OF OVERHEAD DANGER

Operator must be aware of all possible overhead dangers that are within the range of motion of the operating machine.

⚠ WARNING

DO NOT OPERATE WITH A LOOSE ATTACHMENT

Visually check the coupler to verify attachments are secure and lock is fully engaged and that the center to center of the attachment matches the up with the attachment.

⚠ WARNING

PINCH POINTS

Personal injury could result from the careless misuse of this coupler. Keep hands and body parts clear of the coupler when it's in the process of hooking up to an attachment. Be sure the machine is off and the attachment is on the ground prior to making adjustments.



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P.O. Box 545 Findlay, Ohio 45839-0545
1-800-537-9561 *phone*
419-422-7207 *fax*
Werk-Brau.com

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If at any time in the future, you require additional information on this product or any aspects of its use, please do not hesitate to contact Werk-Brau Co., Inc.

Introduction

THANK YOU FOR YOUR PURCHASE

You have received a high quality, extremely versatile attachment that will increase your machine's capability. This product will help you manipulate material and debris. With inspections and proper care, your attachment will last you a long time in a rugged environment.

TELL US WHAT YOU THINK

Werk-Brau would like what you think about its products. Please visit our website & share your experience with us!

Torque Specifications

Please observe these approved torque specs. Failure to follow these specifications can result in damage and other undesirable results.

Dash Size	Tube O.D. (Ref)	Thread Size	37° Flare		Straight Thread	
			Ft-lbs	Nm	Ft-lbs	Nm
4	1/4	7/16-20	10-12	14-16	15-19	20-25
5	5/16	1/2-20	13-16	18-21	20-25	27-33
6	3/8	9/16-18	20-25	27-33	32-40	43-54
8	1/2	3/4-16	34-42	46-56	54-67	73-90
10	5/8	7/8-14	46-58	62-78	74-92	100-124
12	3/4	1-1/16-12	64-80	87-108	102-128	138-173
14	7/8	1-3/16-12	80-100	109-135	128-160	173-216
16	1	1-5/16-12	97-117	131-158	150-187	203-253
20	1-1/4	1-5/8-12	145-165	197-223	227-264	308-357
24	1-1/2	1-7/8-12	230-250	312-338	363-400	492-542

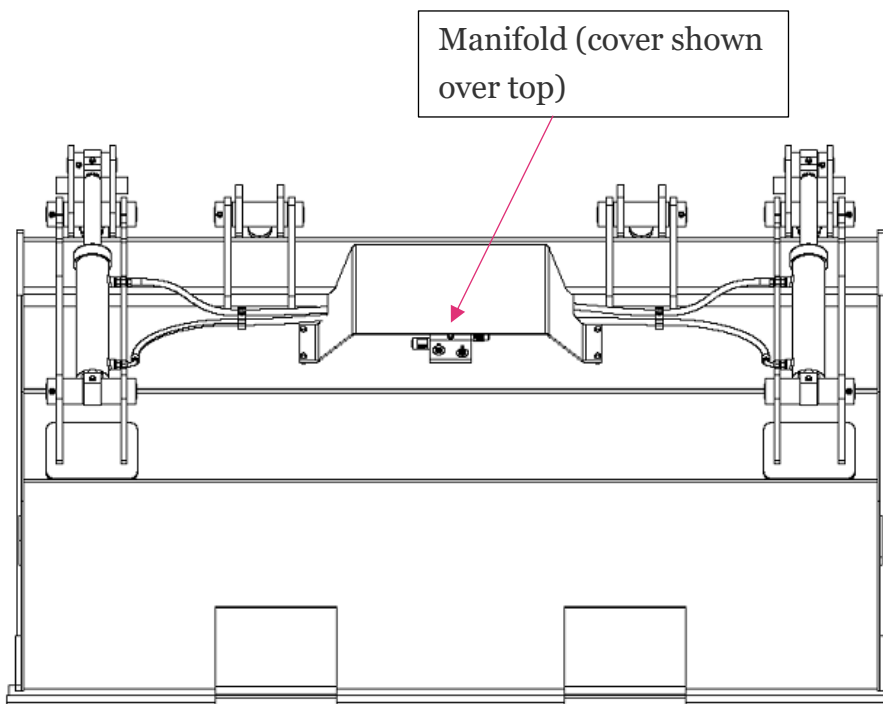
*Apply enough pipe sealer to contact all threads.

**Do not use an excess amount that will squeeze into the hydraulic lines.

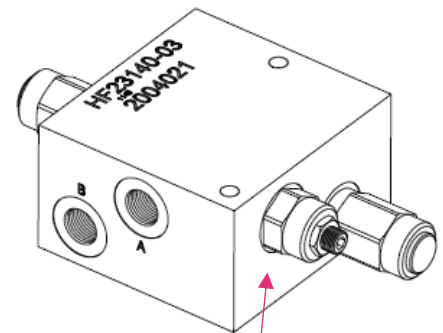
Installation

1. These instructions are for a Grapple Attachment, meaning it could be a Grapple Rake, Fork Carriage or Bucket.
2. Locate the manifold block on the back of the bucket/rake.
3. Make jumper hoses so that there is enough slack to move the attachment throughout all positions without binding or pulling. If you have a coupler, we recommend using self-sealing quick disconnect couplings. Hoses should also be a minimum rating of 4,000 PSI.
4. Your machine auxiliary pressure should be no more than 4,500 PSI to the manifold block. The block does feature a flow control and pressure reducer cartridges, limiting the pressure to the cylinders to 2,900 PSI.
5. Tighten all fittings before testing operation.
6. Ensure that the HYD flow is low enough that the grapple arms are not slamming but high enough that the arms are moving at a good pace. When making adjustments, rotate the flow control cartridge in $\frac{1}{4}$ turn increments.
7. Check for any other possible interference by slowly putting the attachment through rotation.
8. Grease all zerks.

Back View (Hangers not shown)



Manifold (cover shown over top)



Adjustable flow control cartridge, turn nut

Operation

Read all Safety Precautions before operating the attachment. All Grapples are designed to pick up bulky, unusually shaped or long materials that would not stay in an ordinary bucket. Using the grapple attachment in any other way is considered contrary to its intended use.

1. Approach the load in such a fashion that the weight will be centered on the floor of the bucket or in the grapples.

NOTE: When operating the grapple, the load's heaviest side should be towards the back of the attachment and not near the bucket edge/forks. Verify that the bucket is completely under the load and the attachment's floor is level.

2. Close the grapples to their fullest extent when possible and lift the attachment slightly to be certain that the load is secure.

NOTE: If the load appears to be unstable, lower the bucket to the ground, open the grapples and reposition the load to attain full stability. Repeat until full stability is achieved.

NOTICE: When using the grapples as a rake to drag material into position for pick-up, THE GRAPPLES MUST BE COMPLETELY OPEN! Applying a raking-type force to partially open grapples will greatly magnify the fluid pressure in the hydraulic hoses, fitting and cylinder(s) which may cause component failure.

WARNING! Avoid serious injury. THE GRAPPLES MOVE QUICKLY! Do not allow anyone between the grapple and the bucket. Do not lift any load that is taller than the height of the fully opened grapple. Do not roll back this product so that the load falls off toward or on the operator.

Storage

- Clean the unit thoroughly, removing all mud, dirt and grease.
- Inspect for visible signs of wear, breakage or damage. Order any parts required and make the necessary repairs to avoid delays upon removal from storage.
- Tighten loose nuts, cap screws and hydraulic connections.
- Coat exposed portions of the cylinder rods with grease.
- Lubricate grease fittings.
- Seal the hydraulic system from contaminants and secure all hydraulic hoses off the ground to help prevent damage.
- Replace decals that are damaged or in unreadable condition.
- Store unit in a dry and protected place. Leaving the unit outside will materially shorten its life.
- Touch up all unpainted surfaces with paint to prevent rust.

Removal from Storage

- Remove cover.
- Wash unit and replace any damaged and/or missing parts.
- Lubricate grease fittings.
- Check hydraulic hoses for damage and replace as necessary.

Maintenance and Service

Procedure	Daily	Every 40 Hrs
Check all bolts and nuts for tightness	X	
Replace any missing bolts or nuts with approved replacement parts	X	
Check hydraulic system for hydraulic oil leaks. See procedure below.	X	
Visually inspect the machine for worn parts or cracked welds, and repair as necessary.	X	
Lubricate all grease fittings		X

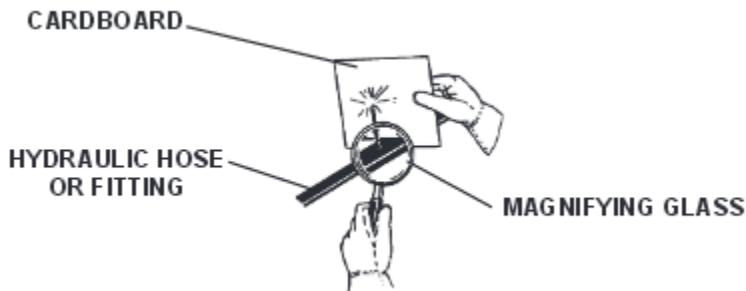
OIL CLEANLINESS REQUIREMENTS All hydraulic fluid shall be filtered before use in any FFC product to obtain the ISO cleanliness standard of 20/18/15. Unless explicitly specified otherwise.

FITTINGS/HOSES INSPECTION GUIDELINES Stop the prime mover engine and release hydraulic pressure before servicing or adjusting hydraulic system.

WARNING Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.

If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research it immediately to determine proper treatment.



IMPORTANT When replacing parts, use only factory approved replacement parts. Manufacturer will not claim responsibility for use of unapproved parts or accessories, and/or other damages as a result of their use.

QUESTIONS

For replacement parts, questions, and other matters please call your local dealer. If you cannot reach a local dealer please call and we will be happy to find a dealer for you and answer any questions.

ABOUT WERK-BRAU Since 1947, Werk-Brau has manufactured the highest quality and most innovative specialty products for the heavy equipment industry. Werk-Brau is respected internationally for providing outstanding customer service and being dedicated to excellence in all aspects of our business. Duke Werkheiser and Dutch Brautigan, for whom the company is named after, first opened their blacksmith shop in Findlay Ohio. Still today Werk-Brau manufactures and produces in Findlay Ohio, in a state of the art facility.

Over the decades Werk-Brau has grown and become so much more than a simple blacksmith operation. Today Werk-Brau proudly employs an industry leading team of professionals who work hard to follow the vision set by the founders of Werk-Brau to “Provide Excellence in Customer Service”. As a modern company Werk-Brau is efficient, high-tech, dedicated to its customers, and deeply proud of the quality of products manufactured.

Werk-Brau manufactures a complete line of O.E.M. and replacement attachments for excavators, mini excavators, backhoes, mini and full size loaders and crawler loaders. All over the world Werk-Brau attachments can be found hard at work in the toughest of conditions.

THANK YOU FOR YOUR PURCHASE!

WORK SAFE

To learn more about your Warranty
please visit:
<http://www.werk-brau.com/warranty-claims>

To file a Warranty Claim
please visit:
<http://www.werk-brau.com/warranty-claims/form>

Or Call:
1-800-537-9561

TOUGH JOBS DEMAND TOUGH ATTACHMENTS



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