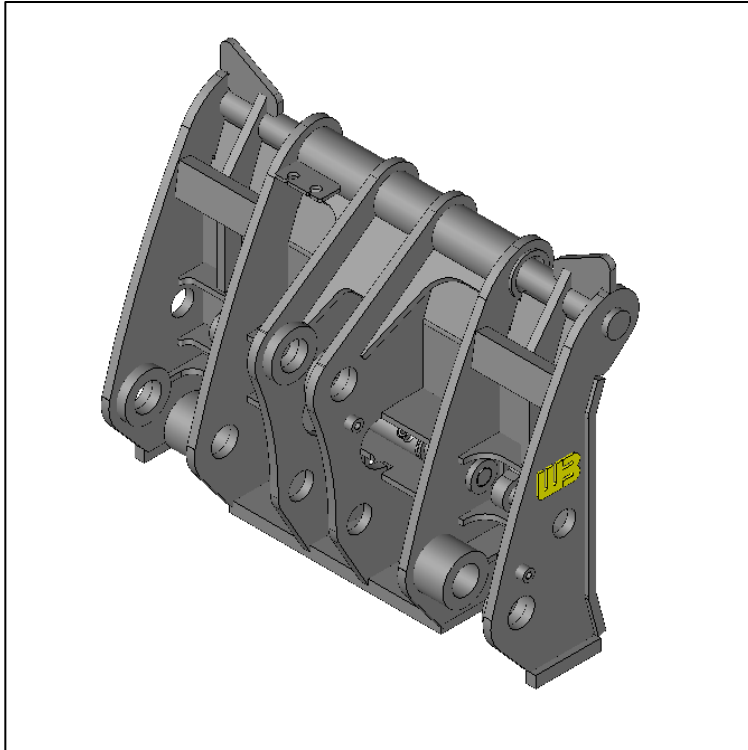


WERK-BRAU CO., INC. PRODUCT AND INSTALLATION MANUAL

WFLHYDQC
(Hydraulic Loader Coupler)



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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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 coupler that will increase your machine's productivity and versatility by enabling the operator to change from one attachment to another very quickly. If installed and maintained properly, it should provide years of service in a rugged environment.

Hydraulic pressure to operate the coupler is provided by tapping into the machine's pilot circuit. This instruction manual describes the installation, operation and maintenance for the Werk-Brau hydraulic loader coupler.

NOTE: Pictures and diagrams throughout this manual may not be your exact Werk-Brau coupler. Pictures represent an action or setup.

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.

Hydraulic Pressure Settings

NOTICE

See pressure decal installed on coupler cylinder.
DO NOT exceed this pressure or equipment can be damaged!

Installation

Misuse or improper installation of this coupler could result in serious personal injury or death to the persons involved. All persons responsible for the safe installation and operation of this coupler should read this manual carefully before attempting to do so.

1. Unpackage the coupler from the shipping skid and orient the coupler so that it can be mounted on the loader with the original equipment pins.
2. Mount the coupler onto the machine in a similar manner as a standard attachment. Retain the mounting pins with the retaining devices supplied with the machine.

Hydraulic Installation

1. Locate a good mounting location for solenoid valve near the pilot pump. Bolt or weld the valve bracket to the machine in a location that allows for easy access to the ports and the solenoids. If welding, be sure to disconnect the battery leads.
2. Install two – 6M O-ring/ - 6M JIC straight (#12) into the A & B ports in the valve.
3. Install one – 6M O-ring/ - 6M JIC 90° adapter (#13) into the P port in the valve and one - 6M O-ring/ - 6M JIC straight (#12) and one – 6 FEM JIC/ - 6M JIC 90° swivel adapter (#14) into the T port of the valve.
4. Locate the pilot pump and tap into the system by an access provided or installing a tee fitting (not provided) which would provide access.
5. Measure required hose length, cut, rinse, and install a reusable – 6 FEM JIC swivel (#11) onto each end. After cutting the hose, it is important to rinse the hose with hydraulic oil. Lubricate the fittings to allow for easy installation. Install this hose from the pilot access to the P port on the valve.
6. Install two – 4M NPT/ adapters (#8) into the ends of the filter (#5) provided.
7. Run a length of the hose from the T port on the valve into the ends of the filter (#5) – locate the arrow on the filter specifying flow direction.

Hydraulic Installation Continued

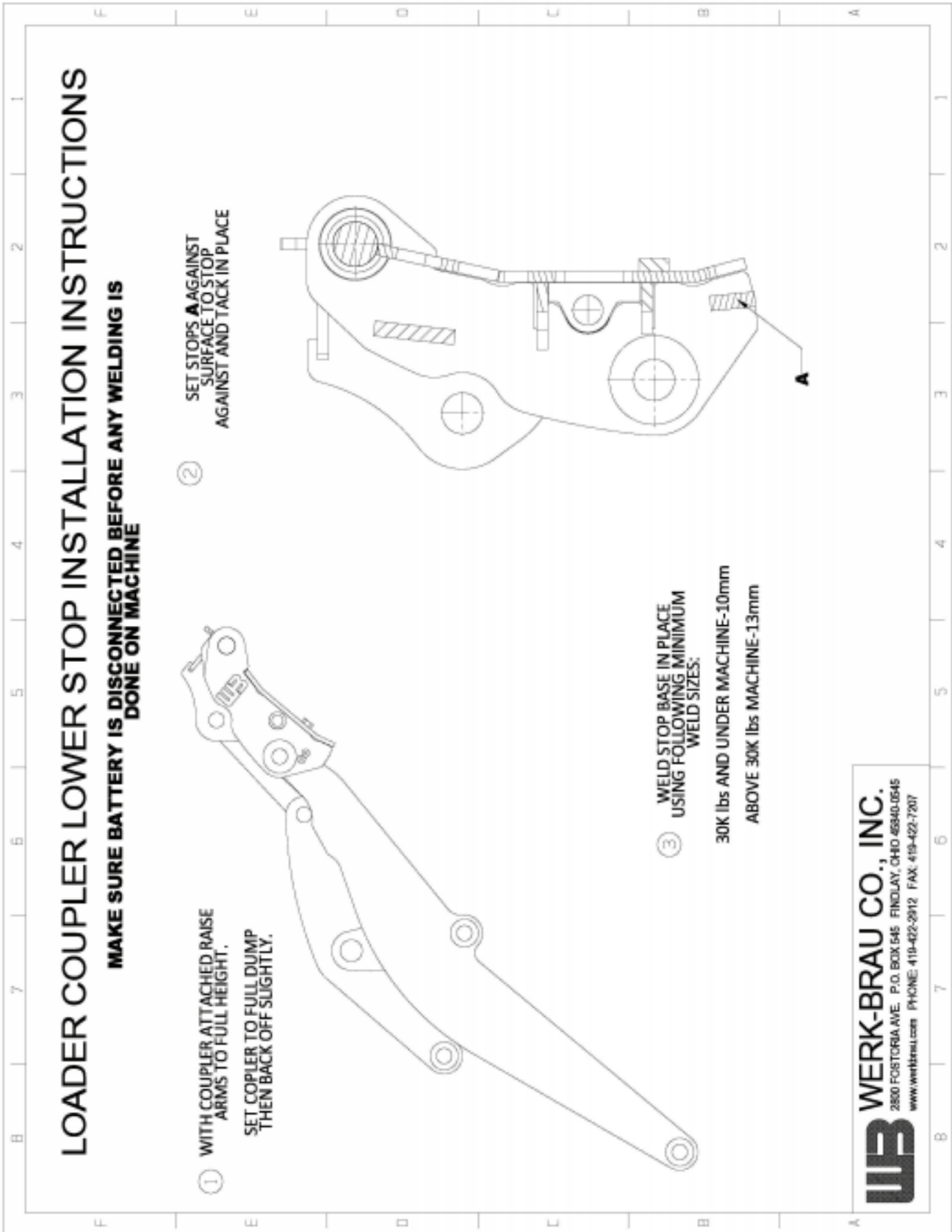
8. Install another hose of the required length into the opposite end of the filter (#5) and run this hose into a tank access port. If an easy access is not available, a tee fitting could be installed or the access cap on the top of the hydraulic reservoir could be removed, drilled and tapped for A-6NPT (#16) fitting provided.

9. Next, route a pair of hoses from A & B ports of the solenoid valve and down the loader arms. Be sure to allow enough hose to accommodate the motions of the loader. It is best to route the hoses near any pivot points and attach them with hose clamps (#7) and wire ties (#6) provided.

10. A manifold is mounted in the center of the coupler and the cylinders are pre-plumbed into it. Route the hoses to the cross beam of the loader (Z-Bar) attach there a loop down to the manifold of the coupler.

11. Start the machine and rotate the coupler back and forth checking for clearance. Tighten all fittings and check to see that all hoses are properly secured. Check all stop locations (roll and dump) to be sure they are contacting the coupler properly. Additional stops may need to be installed.

Loader Coupler Lower Stops Installation



Maintenance

PROCEDURE	INTERVAL	NOTE
GREASE FITTINGS (IF APPLICABLE)	WEEKLY	
CHECK TOP PADS ON ALL ATTACHMENTS	DAILY	ADD SHIMS IF WORN OR LOOSE

Troubleshooting

Problem #1

Pins will not engage properly.

Cause/Corrective Action

- A.) *Foreign debris have caused locking mechanism to bind.*
- B.) *Verify that the attachment pin centers match that of the coupler.*
- C.) *Verify that the coupler is not contacting the attachment.*
- D.) *Verify that the hangers and coupler match in size and type.*

Should you require any assistance or technical support, installation assistance is available by contacting Werk-Brau.

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

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

TOUGH JOBS DEMAND TOUGH ATTACHMENTS



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