

# FISH HOUSE FRAME OWNERS & OPERATOR'S MANUAL

## TABLE OF CONTENTS

INTRODUCTION
WARRANTY
SAFETY
SAFETY SIGNAL WORDS
GENERAL SAFETY GUIDELINES
SAFETY SIGN LOCATIONS
SAFETY DECAL CARE
TIRE SAFETY
DIRECTIONS FOR OPERATING
LIGHTING AND MARKING
BEFORE OPERATION
DURING OPERATION
HIGHWAY AND TRANSPORT OPERATIONS
FOLLOWING OPERATION
FRAME CAPACITIES
PERFORMING MAINTENANCE
GREASING BEARINGS
MAINTENANCE CHART

## INTRODUCTION

Thank you for purchasing a crank down frame with GS Trailers lowering technology. We hope you will get many years of productive use from it. This frame is designed to be pulled by a proper size vehicle. All product users must read and understand this manual prior to equipment operation. This manual is considered part of your fish house frame and should remain with it at all times. Do not allow anyone to operate or maintain this fish house frame that has not fully read and comprehended this manual. Failure to follow the recommended procedures may result in personal injury or death or equipment damage. Some photographs, diagrams or illustrations in this manual may show doors, guards and shields opened or removed to aid in clarity and understanding of a particular procedure. All guards, shields and safety devices must be in their proper position prior to operation.

## WARRANTY

GS Trailers, Watertown, SD 57201 \ GS / BW, Detroit Lakes, Minnesota 56501, hereby referred to as GS / BW, offers a 3/2/1 year warrant on its products. (3) year on material and craftsmanship, (2) year on purchase parts, (1) year on coatings from the date of original purchase when used as intended and under normal service and conditions. This warranty is limited to the replacement of any defective part by GS / BW, provided that any such defective part must be returned to GS / BW, TRANSPORTATION PREPAID, accompanied by a letter setting forth the nature of the defect. If the part is found to be defective by reason of materials or workmanship, GS / BW, shall replace the part, but shall not be responsible for its reinstallation. This warranty does not cover or apply to any products or component parts which have been tampered with, modified or altered in any way or which have been subject to misuse, negligence, involved in an accident, or damaged by an act of God.

## **EXCLUSION OF WARRANTIES**

GS / BW MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE IN RESPECT TO ITS PRODUCTS OR COMPONENT PARTS. GS / BW SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FROM ANY BREACH OF WARRANTY, INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, INCONVENIENCE, AND THE COST OF RENTAL OR REPLACEMENT EQUIPMENT. NO AGENT, EMPLOYEE OR REPRESENTATIVE OF GS / BW HAS THE AUTHORITY TO BIND IT TO ANY AFFIRMATION, STATEMENT OF WARRANTY CONCERNING ITS PRODUCTS AND THEIR COMPONENT PARTS EXCEPT AS SPECIFICALLY SET FORTH HEREIN.

## **SAFETY**

Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually. TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH. THIS SYMBOL MEANS ATTENTION!

-

BECOME ALERT!

-

YOUR SAFETY IS INVOLVED!

## **SAFETY SIGNAL WORDS**

Note the use of signal words  
DANGER, WARNING and CAUTION with the safety messages.

The appropriate signal word for each has been selected using the following guidelines:

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe procedures.

**DANGER:** Indicates a imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes cannot be guarded.

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

## **GENERAL SAFETY GUIDELINES**

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for

you, follow them. Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

For your safety, before operating the winches on your fish house frame, check all clamps to guarantee they are tight. Failure to do so may result in bodily injury. Do not attempt to operate this equipment under the influence of drugs or alcohol. Review the safety instructions with all users annually. This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar and trained in this equipment's operations.

Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Do not paint over, remove or deface any safety signs or warning decals on your fish house frame.

Observe all safety signs and practice the instructions on them. Never exceed the limits of a piece of machinery. If its ability to do a job or, or to do so safely, is in question - DON'T TRY IT.

### **SAFETY SIGN LOCATIONS**

REMEMBER: If Safety Signs have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your authorized distributor or factory. Your trailer and Fish House came with factory safety stickers.

### **SAFETY DECAL CARE**

Keep safety signs clean and legible at all times.

Replace safety signs that are missing or have become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety signs are available from your distributor or dealer parts department or the factory.

How to Install Safety Signs:

Be sure that the installation area is clean and dry.

Decide on the exact position before you remove the backing paper.

Remove the smallest portion of the split backing paper.

Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.

Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.

Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

## **TIRE SAFETY**

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.

Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.

Always order and install tires and wheels with appropriate capacity to meet or exceed the anticipated weight to be placed on the equipment.

## **DIRECTIONS FOR OPERATING YOUR DROP DOWN FRAME**

When lowering your fish house frame, let the front hitch winch down first and then the side winches. When raising the fish house, raise both side winches first, then the front hitch winch.

When lowering or raising your fish house frame, DO NOT lean over the leaf spring, stand behind the winch. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SERIOUS BODILY INJURY AND/OR DAMAGE TO OUR FISH HOUSE FRAME. Keep hands and feet clear of the frame when lowering the front and side winches of the fish house frame.

## **LIGHTING AND MARKING**

It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with the regulations.

Lighting Kits are available from your dealer or from the manufacturer. BEFORE OPERATION

For your safety, before operating the winches on your fish house frame, check all clamps to guarantee they are tight. Failure to do this may result in bodily injury.

Carefully study and understand this manual.

Keep wheel lug nuts or bolts tightened to specified torque.

Assure that tires are inflated to proper air pressure.

Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions in this manual.

Do not use the unit until you are sure that the area is clear, especially children and animals.

Securely attach to towing unit. Use a high strength, proper sized hitch ball with a mechanical retainer and attach safety chain.

Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the equipment. DURING OPERATION

Children should not be allowed on the product.

Clear the area of small children and bystanders before moving the fish house frame.

Make sure you are in compliance with all local and state regulations regarding transporting equipment on public roads and highways. Lights must be clean and visible by overtaking or oncoming traffic when fish house frame is transported.

### **SAFETY CHAINS**

If equipment is going to be transported on a public highway, a safety chain should be obtained and installed. Always follow state and local regulations regarding a safety chain and auxiliary lighting when towing your fish house frame on a public highway. Be sure to check with local law enforcement agencies for your own particular regulations. Only a safety chain (not an elastic or nylon/plastic tow strap) should be used to retain the connection between the towing and towed machines in the event of separation of the primary attaching system.

Install the safety chain by crossing the chains under the tongue and secure to the draw bar cage or hitch or bumper frame.

Beware of bystanders, particularly children! Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.

### **NO PASSENGERS ALLOWED**

Do not carry passengers anywhere on, or in, the frame, except as required for operation.

Keep hands and clothing clear of moving parts.

Do not clean, lubricate, or adjust your equipment while it is moving.

Be especially observant of the operating area and terrain. Watch for holes, ice heaves, rocks, or other hidden hazards. Always inspect the area prior to operation.

DO NOT operate near the edge of drop-offs or banks.

DO NOT operate on steep slopes as overturn may result.

Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.

## **HIGHWAY AND TRANSPORT OPERATIONS**

DO NOT!! EXCEED 55 MILES PER HOUR

Adopt safe driving practices: Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum. Reduce speed prior to turns to avoid the risk of overturning. Avoid sudden uphill turns on steep slopes.

Do not drink and drive!

Comply with state and local laws governing highway safety and movement of on public roads.

Local and state laws should be checked for all highway lighting and marking requirements.

Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.

Be observant of bridge load ratings. Do not cross bridges rated lower than the gross weight as which you are operating.

Watch for obstructions overhead and to the side while transporting.

Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.

Be extra careful when working on inclines.

Avoid loose fill, rocks and holes; they can be dangerous for equipment operation or movement.

Operate the towing vehicle from the operator's seat only.

As a precaution, always recheck the hardware on equipment following each and every use. Correct all problems. Follow the maintenance safety procedures.

## **FOLLOWING OPERATION**

Store the unit in an area away from human activity.

Do not permit children to play on or around the stored unit.

Make sure all parked machines are on a hard, level surface and engage all safety devices.

Wheel chocks may be needed to prevent unit from rolling.

CARRYING CAPACITY EQUALS THE TOTAL OF WHAT IS BUILT ON TO THE FRAME PLUS ANYTHING THAT IS CARRIED IN THE UNIT WHEN COMPLETE!

## **PERFORMING MAINTENANCE**

Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.

Be certain all moving parts on frame have come to a complete stop before attempting to perform maintenance.

Always use a safety support and block the wheels. Never use a jack to support the frame.

Always use the proper tools or equipment for the job at hand.

Use extreme caution when making adjustments.

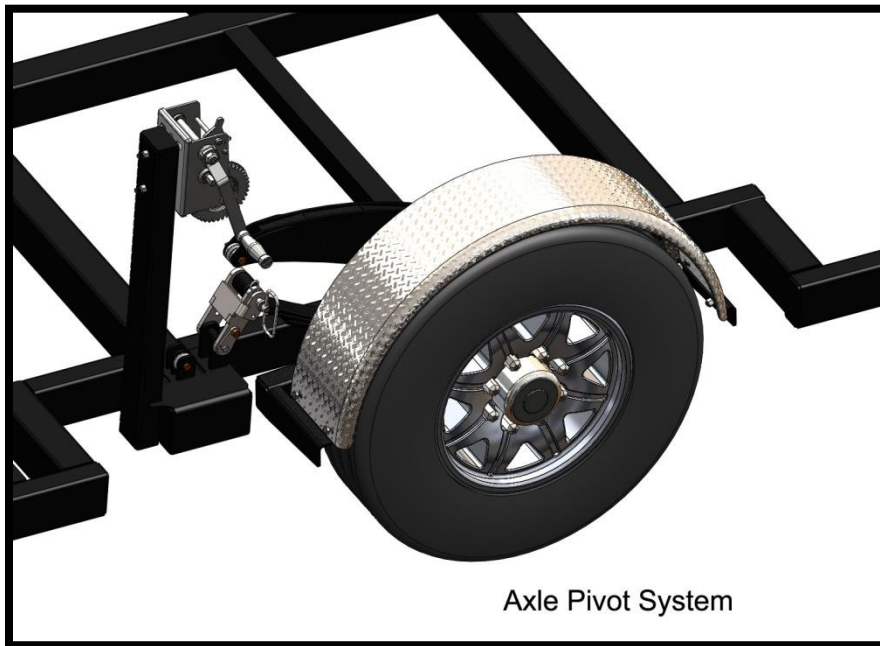
Never replace hex bolts with less than grade five bolts unless otherwise specified.

After servicing, be sure all tools, parts and service equipment are removed.

Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.

If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty. Most trailer axle bearings are unlike those in your motor vehicle in that they require periodic maintenance to ensure reliable, safe operation of your trailer.

## **AXLE AND PIVOT MAINTENANCE**

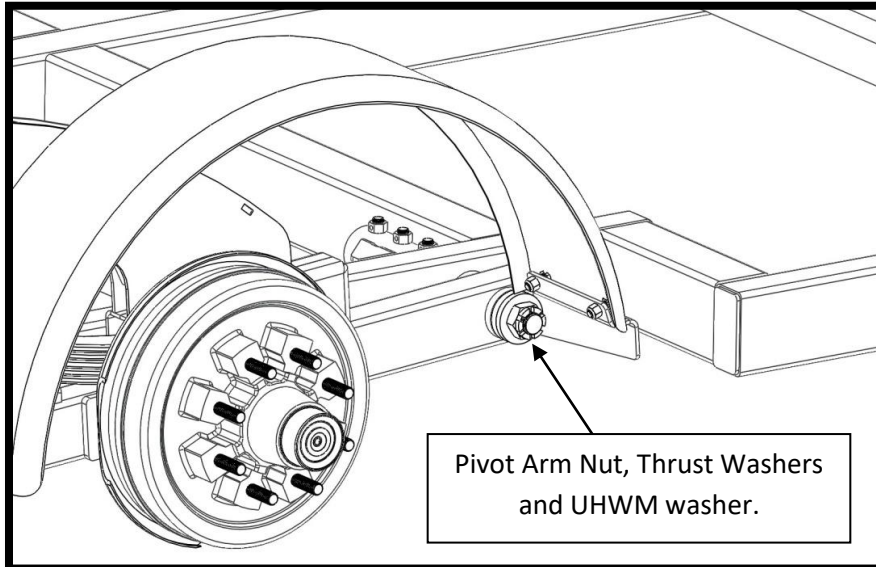


The axle pivot system is a greaseless system using the latest in poly/strand material design. It does not need greasing. General maintenance is required to make sure that all parts are functioning as needed.

## AXLE PIVOT SYSTEM CHECK / MAINTENANCE

House must be supported on 4" of blocks and cable pressure released. Pin must be removed from leaf spring retainer.

1. Remove the tire. Care must be taken in order so that wheel pivot assembly does not fall on the maintenance operator.
2. Grab the end of the axle pivot assembly. Wiggle in and out. There will be a little play back and forth. If the assembly can be moved more than 1/2" in and out each direction, Maintenance is required. IF maintenance is required, follow instructions below.
3. Straighten cotter pin in order to remove pin from nut and axle.

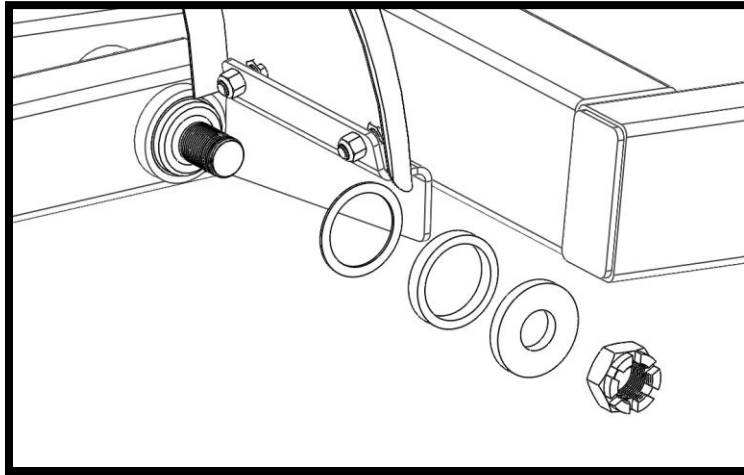


**\*\*VIEW OF AXLE NUT AND WASHER ASSEMBLY WITHOUT TIRE\*\***

4. Remove the axle nut.
5. Remove the thrust washer.
6. Remove the thrust plate.
7. Remove the UHMW washer.
8. Inspect the Axle pivot bushing. Removal of pivot arm may or may not be necessary. Use care when removing the pivot arm as it is heavy and may require 2 people. Winch Cables will need to be disconnected.
8. Inspect the pivot bushing - replace if necessary.



## **RE-ASSEMBLY OF AXLE PIVOT**



**\*\*ORDER OF RE-ASSEMBLY\*\***

1. Reinstall all parts in the reverse order from above.
2. Install the outer nut to finger tightness, then take wrench and turn to the next available slot in the nut to line up with the hole in the axle.
3. Reinstall the cotter key, bending the protruding tabs in opposite directions.
4. Reinstall the tire and wheel assembly. Torque the lug nuts to the specified torque setting per the wheel manufacturers specifications.

## **GREASING AXLE BEARINGS**

1. Remove dust cap to expose the axle nut.
2. Straighten cotter pin in order to remove pin from nut and axle.
3. Hub should now slide off of axle shaft. Packing Bearings Prior to repacking bearings, all grease must be removed from the hub/drum and bearings. Bearings should be packed by machine or by hand methods to ensure that grease is forced into the cavities between the rollers, cone and cage of the bearings. Use a high temperature, automotive type wheel bearing grease to repack your bearings.
4. Once bearings are greased properly you are now ready to reassemble the hub to the axle.

## **MAINTENANCE CHART ITEM INTERVAL**

Check tire pressure - Before transporting.

Check lug nuts for tightness - Before transporting.

Grease wheel bearings – after 1000 miles, yearly or more based on milage.

Clean & Paint - As needed.