



LAND ROLLER OPERATOR AND PARTS MANUAL

MANUFACTURED BY:
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Introduction

Thank you for choosing a **Smyth Welding** Land Roller.

Used to firm soil for better seed to soil contact, pressing stones into the ground to help protect harvest equipment and for breaking down heavy stalk crops. Rolling new crops at key times helps retain moisture and increases yields. We are confident this equipment will meet your expectations in terms of quality, performance and reliability.

Please read this manual completely before operating your land roller and keep it for future reference. It contains important information and was made to assist you in the safe operation of your new land roller and to ensure it performs to its fullest capabilities.

Before using this land roller, any person who will be operating the land roller must be familiar with the safety recommendations and the operating instructions. Please read carefully and be sure to understand and follow all recommendations and procedures.

If you require additional information on your land roller, please contact your **Smyth Welding** land roller dealer.

Information needed for warranty and ordering parts:

Date of purchase: _____

Serial Number: _____

Model Number: _____

Special Options: _____

Warranty Information

Smyth Welding & Machine Shop Ltd. products are warranted for a period of 1 year from the date of original purchase, by the original purchaser, to be free from defects in material and workmanship under correct and normal use and proper applications.

Smyth Welding & Machine Shop Ltd. obligations under this warranty shall be limited to the repair or exchange at **Smyth Welding's** option, of any **Smyth Welding** product or part which proves to be defective as provided. The customer will return his unit to his dealer where it was purchased and if the dealer agrees with the warranty, they must then notify **Smyth Welding** to get authorization.

The equipment must be installed, operated and maintained in accordance with **Smyth Welding's** instructions.

This warranty does not extend to goods damaged or subject to accident, abuse or misuse after shipment from **Smyth Welding**, nor to goods altered or repaired by anyone other than an authorized **Smyth Welding** representative.

Smyth Welding shall in no event be responsible for any consequential damages of any nature whether special or general, direct or indirect.

Any warranty or claim which differs from that set out is unauthorized by **Smyth Welding & Machine Shop Ltd.** and is the warranty only of the party making it. **Smyth Welding & Machine Shop Ltd.** makes no other warranty, expressed or implied and the original user's sole remedy for breach thereof is as set forth.

To obtain warranty a copy of original bill of sale is required and all claims must be submitted within a 30 days from date of equipment failure.

Safety Information

This operator's manual should be regarded as part of the land roller. Suppliers of both new and secondhand land rollers are advised to keep documentation indicating that this manual was provided with the land roller.

Obey all safety instructions listed in this section and throughout this manual. Failure to do so could result in serious injury or death.

-Know all your controls and know how to quickly stop all power unit movement and the land roller movement.

-Know and follow good work practices when assembling, mounting, maintaining, repairing, removing and storing this product.

-Always make sure land roller is lowered into field position (cylinders extended) and is blocked to prevent movement and that pressure is relieved from hydraulic circuits before servicing.

-Wear appropriate personal protection equipment.

-Never allow anyone, except the operator, to be around the power unit on this product when it is in use.

-Do not allow riders on this product or the power unit.

-Do not stand or climb on this unit when operating.

-Never leave equipment unattended with the power unit running.

-Ensure all safety warning decals are legible. Contact **Smyth Welding & Machine Shop Ltd.** for replacement of missing or damaged safety decals.



Maintenance

See your Smyth Welding dealer to replace any worn or damaged parts.

Bearings:

- grease after every 8 hours of use
- grease roller bearings after every 50 hours of use.

Tires:

- Check tire ratings to be sure they match the power unit load.
- Check wheel nuts and torque to the recommended amount of 115-125 ft pounds of torque for all models.

Grease wing and hitch pivots before each use.

Operation Information

Recommended tractor size is a minimum of 2 hp per foot of roller width.

Place the land roller on a firm, level surface that is large enough to accommodate this product, your power unit and all works involved in the mounting process.

After initial assembly of the land roller, inspect the entire machine to ensure all fasteners are secure.

Check all grease fittings and grease machine

Check that tires are properly inflated.

Check hose clearances for any interference.

Operate the controls from the operator's station only.

Never leave equipment unattended with the engine running.

Do not attempt to raise machine into transport position if mud has built up on rollers, or if machine weight has been increased by any other means. This could lead to mechanical failure.

Be aware of added weight and width of this product. Reduce travel speeds accordingly, especially when traveling on rough ground.

Use care on slopes and excessive incline areas.

Replace any damaged or fatigued hardware with properly rated fasteners.

Make sure all hydraulic hardware and hydraulic fittings are tight.

Hydraulic Safety:

- Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death.
- Hydraulic leaks under pressure may not be visible, wear safety glasses, protective clothing, and use a sound piece of cardboard when searching for hydraulic leaks. **DO NOT USE YOUR HANDS.**
- Before connecting or disconnecting hydraulic hoses, read your power unit's operator's manual for detailed instructions on connecting and disconnecting hydraulic attachments.
- Make certain that all parts meet the specifications for this product when installing or replacing hydraulic hoses or fittings.
- Refer to your power unit's operator's manual and this manual for procedures and intervals, then inspect and maintain the entire hydraulic system to insure that the fluid remains clean, that all devices function properly, and that there is no fluid leaks

Unfold from Transport to Field Position

Land roller must be hooked to tractor prior to raising or lowering wings

Do not raise or lower land roller when implement is moving.

Tractor and land roller must be in a firm level area clear of people and objects to unfold

Un-hook auto locks, if supplied

Do not allow any person to stand near the Land Roller when folding or unfolding

Activate the lift cylinder hydraulic valve. Lower the machine completely to the ground; fully retract lift cylinders so wheels rise off the ground.

Lower wings first for X-fold models only.

Fold from Field to Transport Position

Land roller must be hooked to tractor prior to raising or lowering wings

Do not allow any person to stand near the Land Roller when folding or unfolding

Do not raise or lower land roller when implement is moving.

Do not attempt to raise machine to transport position if dirt or mud has built up on rollers, or if the weight has been increased by other means

Activate the lift cylinder hydraulic valve raising wings off the ground.

Transporting

Follow steps required to fold land roller from Field to Transport position

Tow at a safe speed. Use caution when turning corners or meeting traffic.

Use safety chain between tractor drawbar and implement when transporting on public roads

Use safety lights when transporting on a public road

Be aware of any overhead powers lines or any other overhead objects

Un-Hooking

Ensure the land roller is fully in field position or transport position and not between the two

Tractor and land roller must be in a firm level area

Chock implement to prevent any movement after hitch pin is removed

Position jack and extend to desired height.

Remove hitch pin, disconnect hydraulic hose, wiring harness and safety chains.

Storage

Ensure the land roller is fully in field position or transport position and not between the two.

Tractor and land Roller must be in a firm level area.

Chock implement to prevent any movement after hitch pin is removed.

Position jack and extend to desired height.

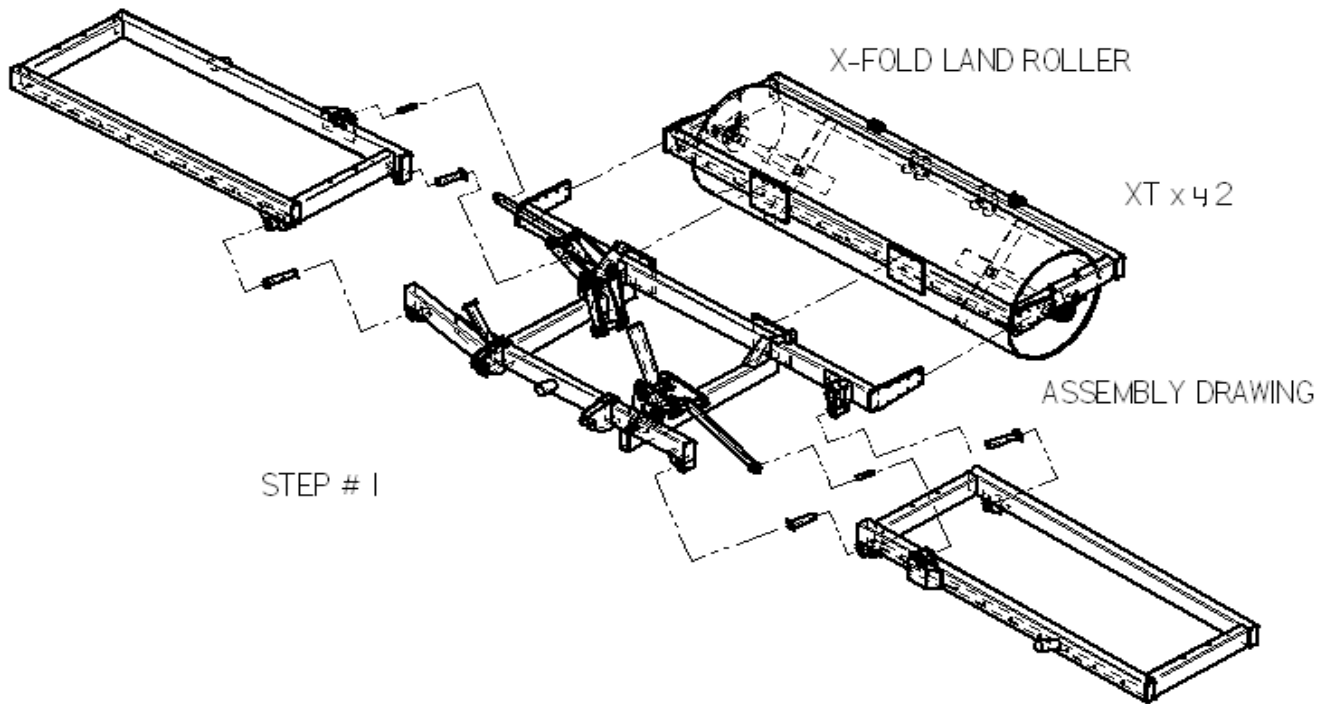
Remove hitch pin, disconnect hydraulic hose, wiring harness and safety chains.

Remove any excess dirt and grease from Land Roller.

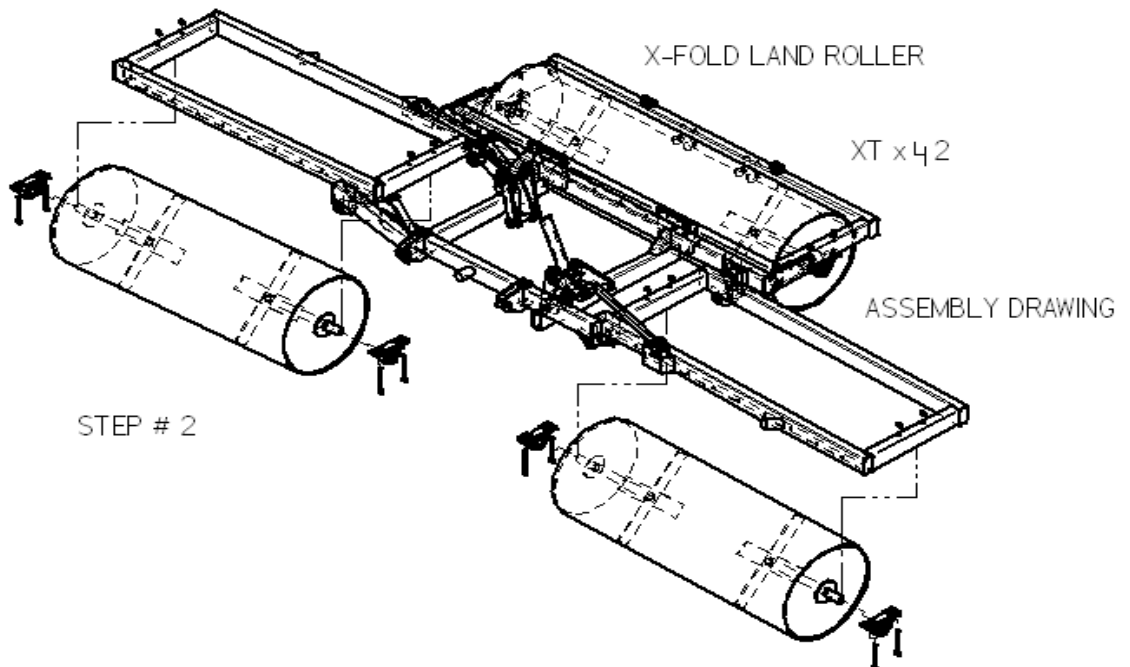
Grease all fittings.

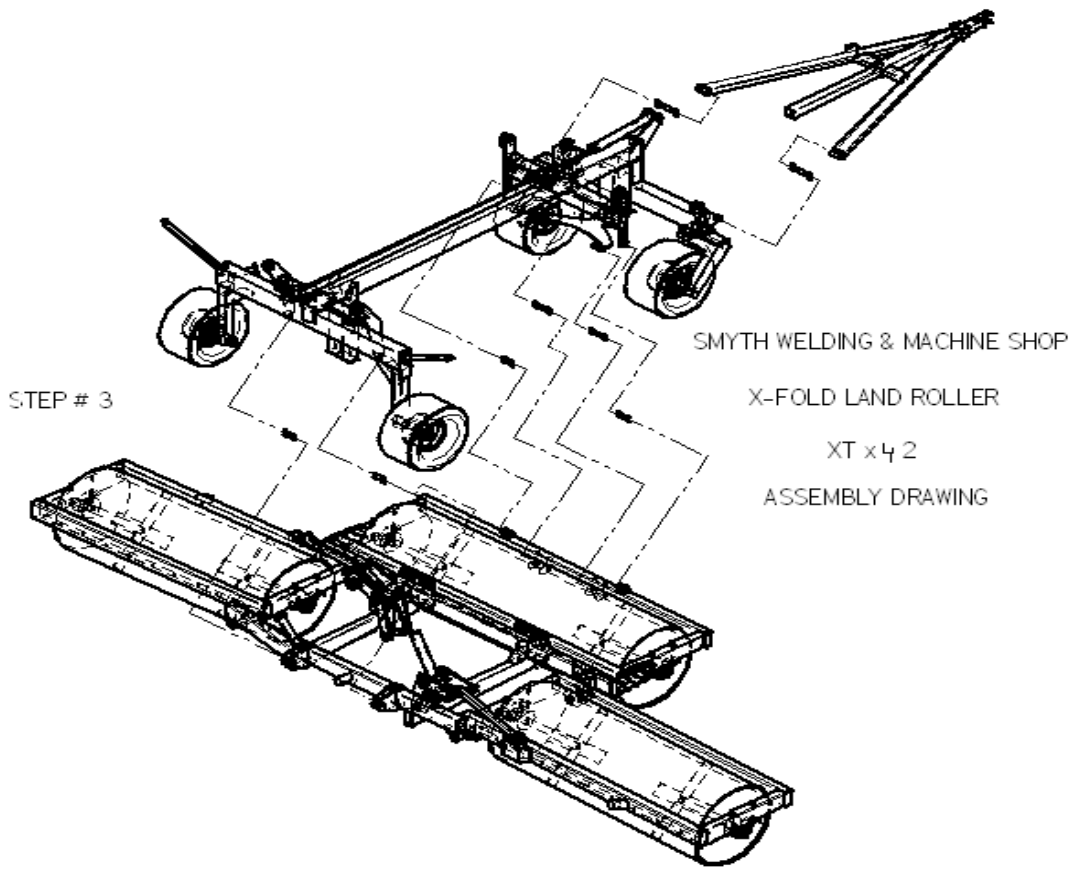
XT Assembly Instructions

SMYTH WELDING & MACHINE SHOP

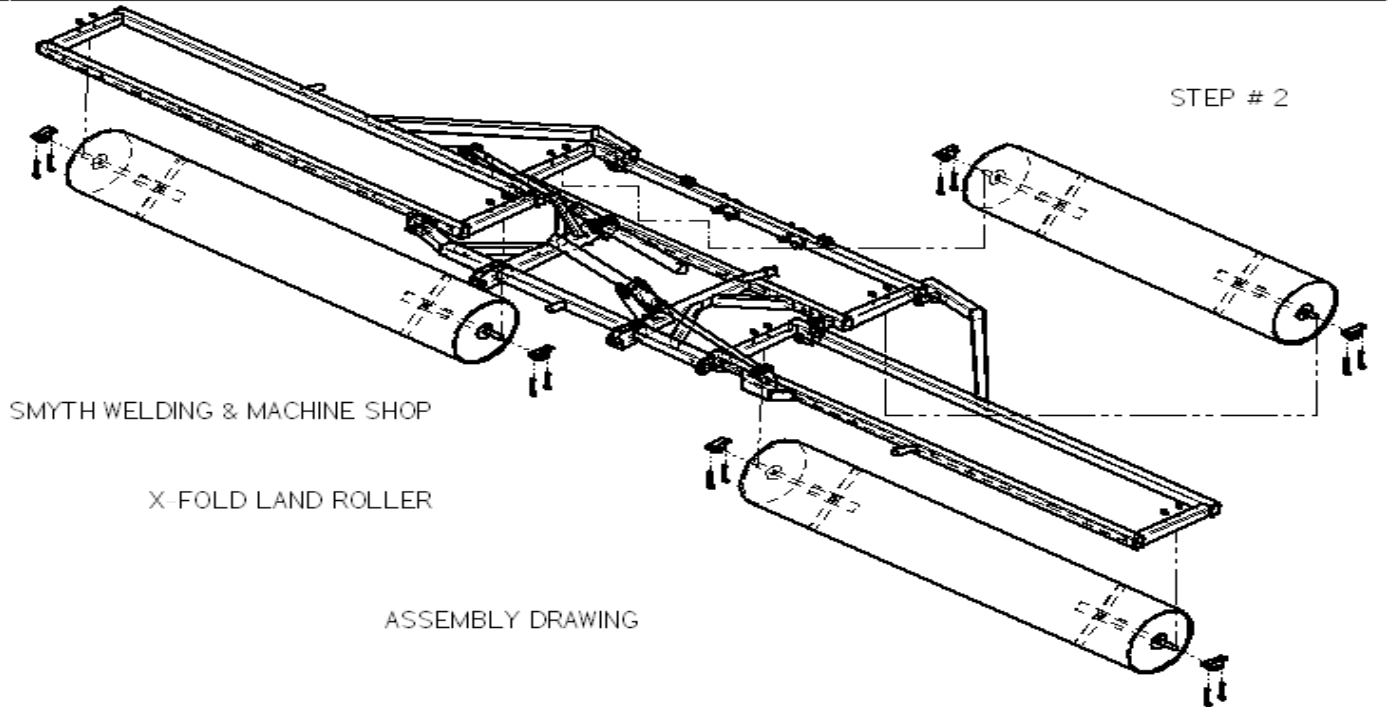
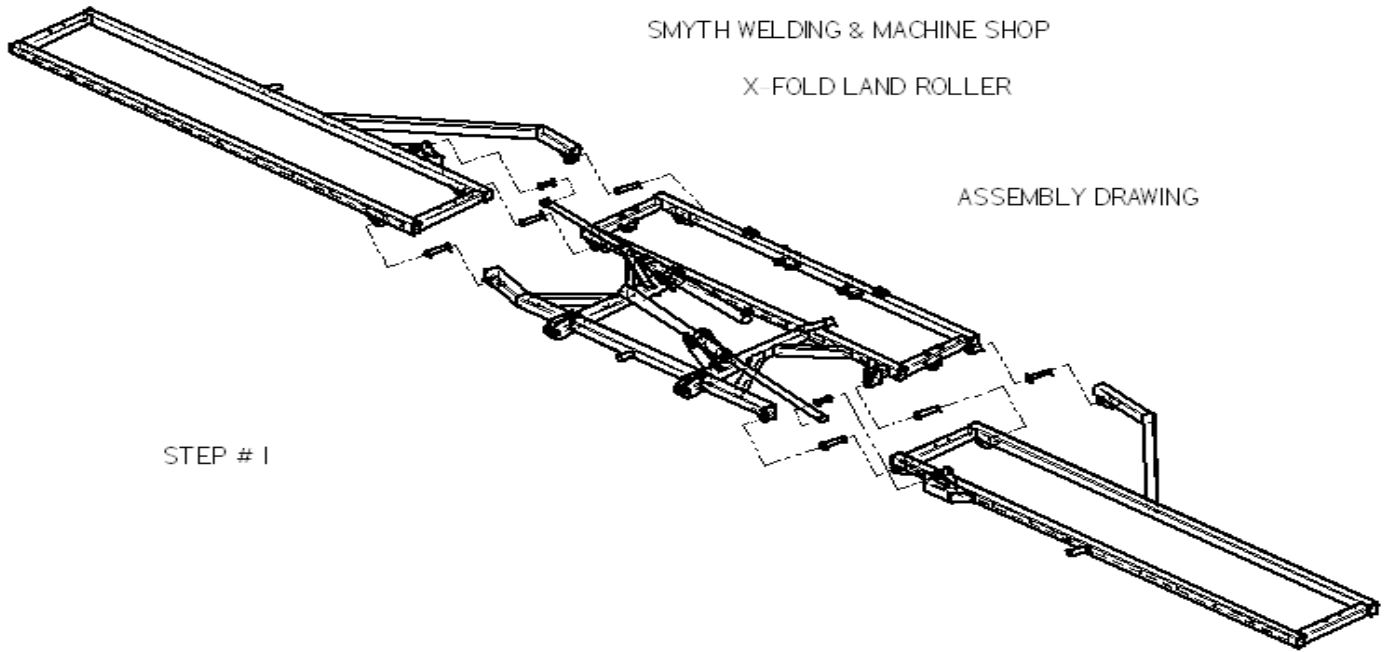


SMYTH WELDING & MACHINE SHOP

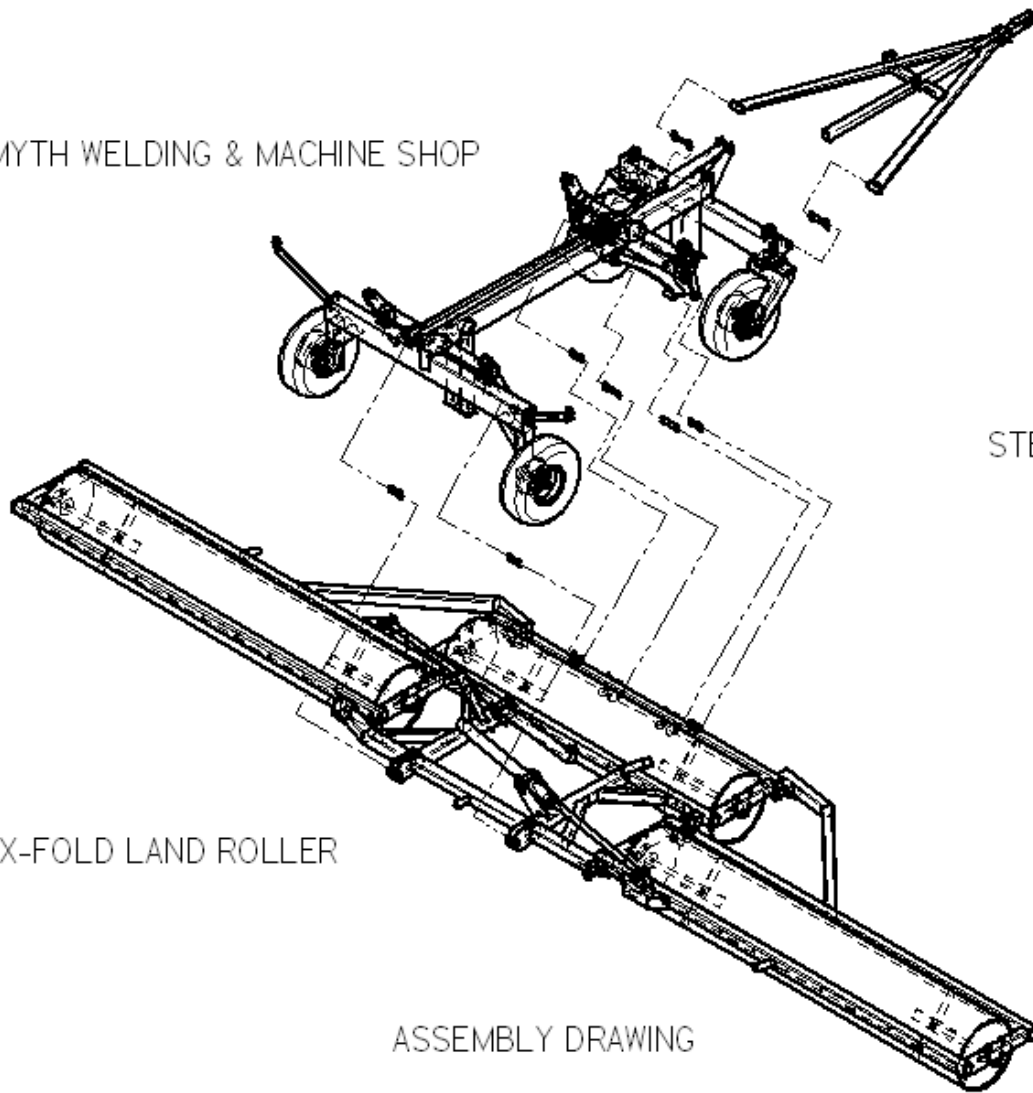




XS Assembly Instructions



SMYTH WELDING & MACHINE SHOP

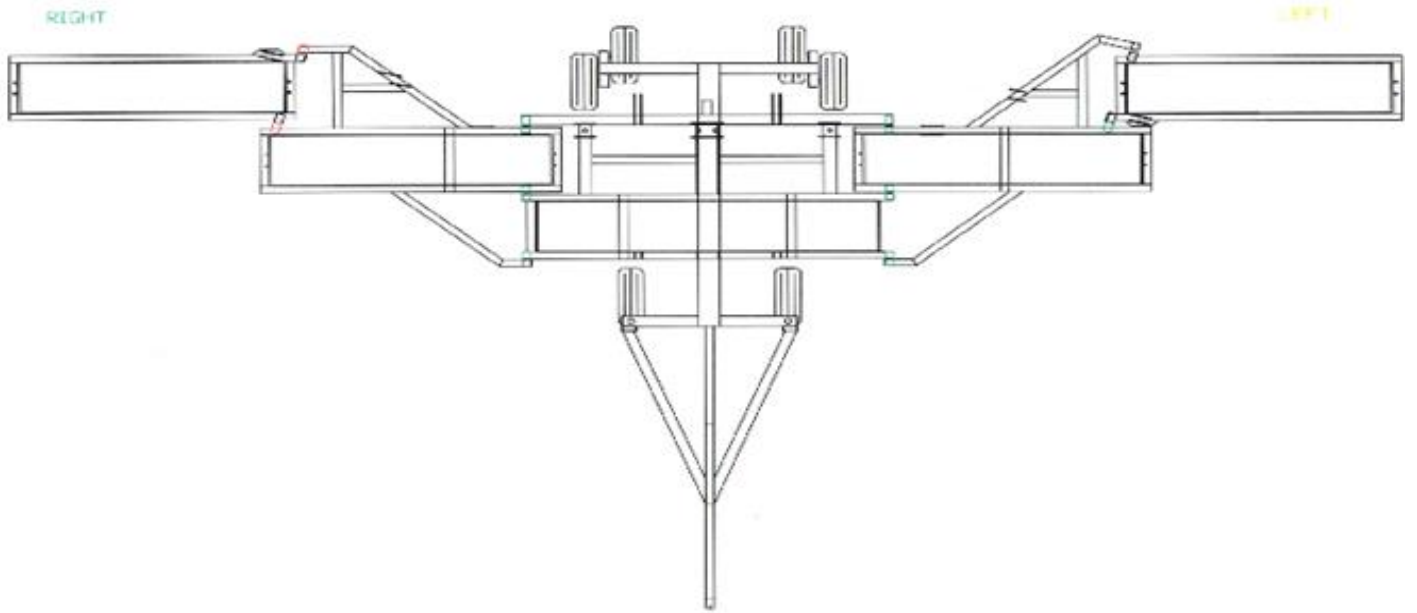


STEP # 3

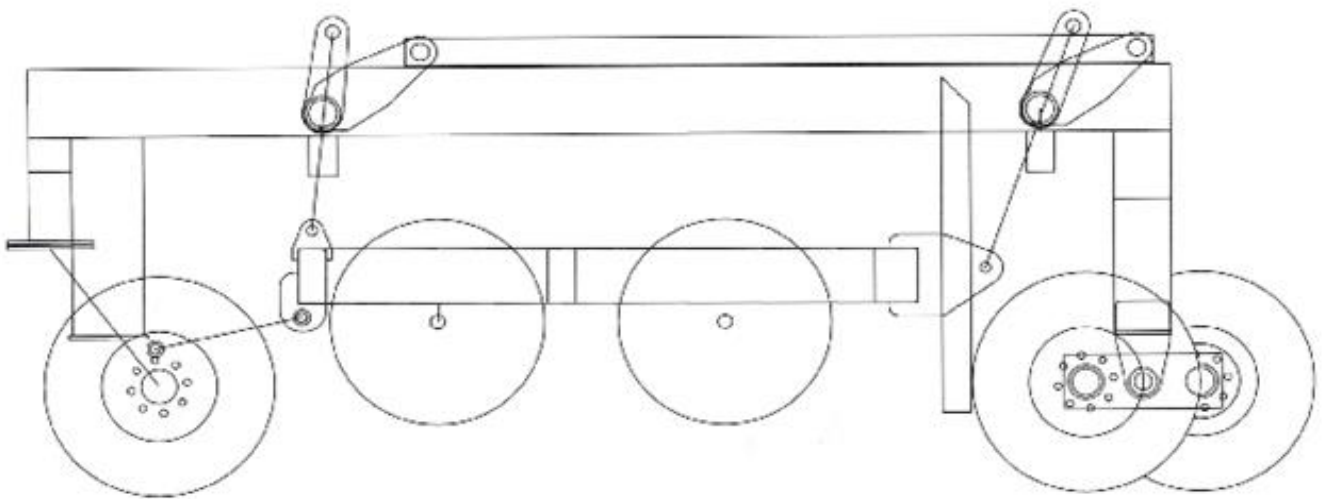
X-FOLD LAND ROLLER

ASSEMBLY DRAWING

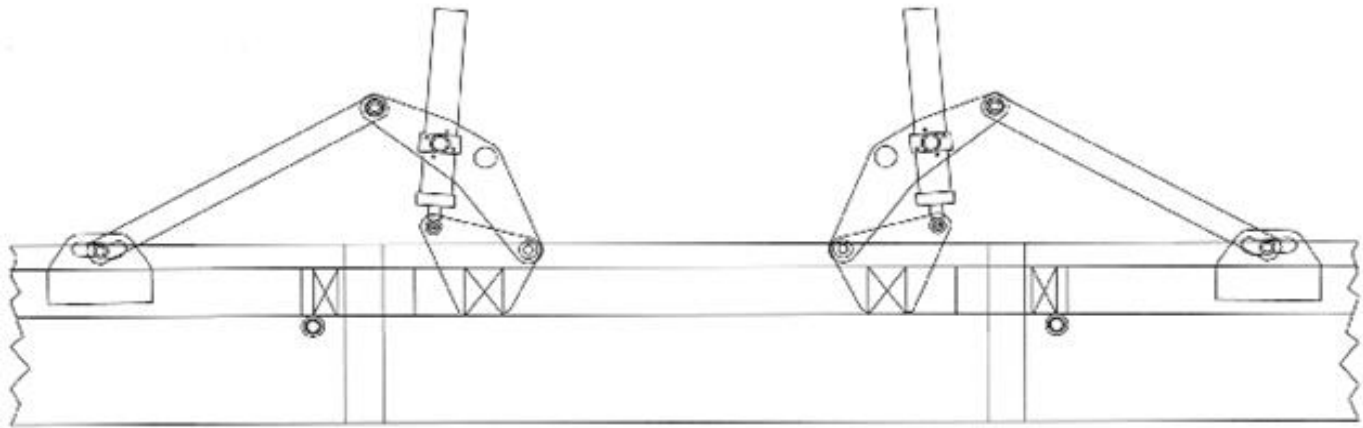
DF Assembly Instructions



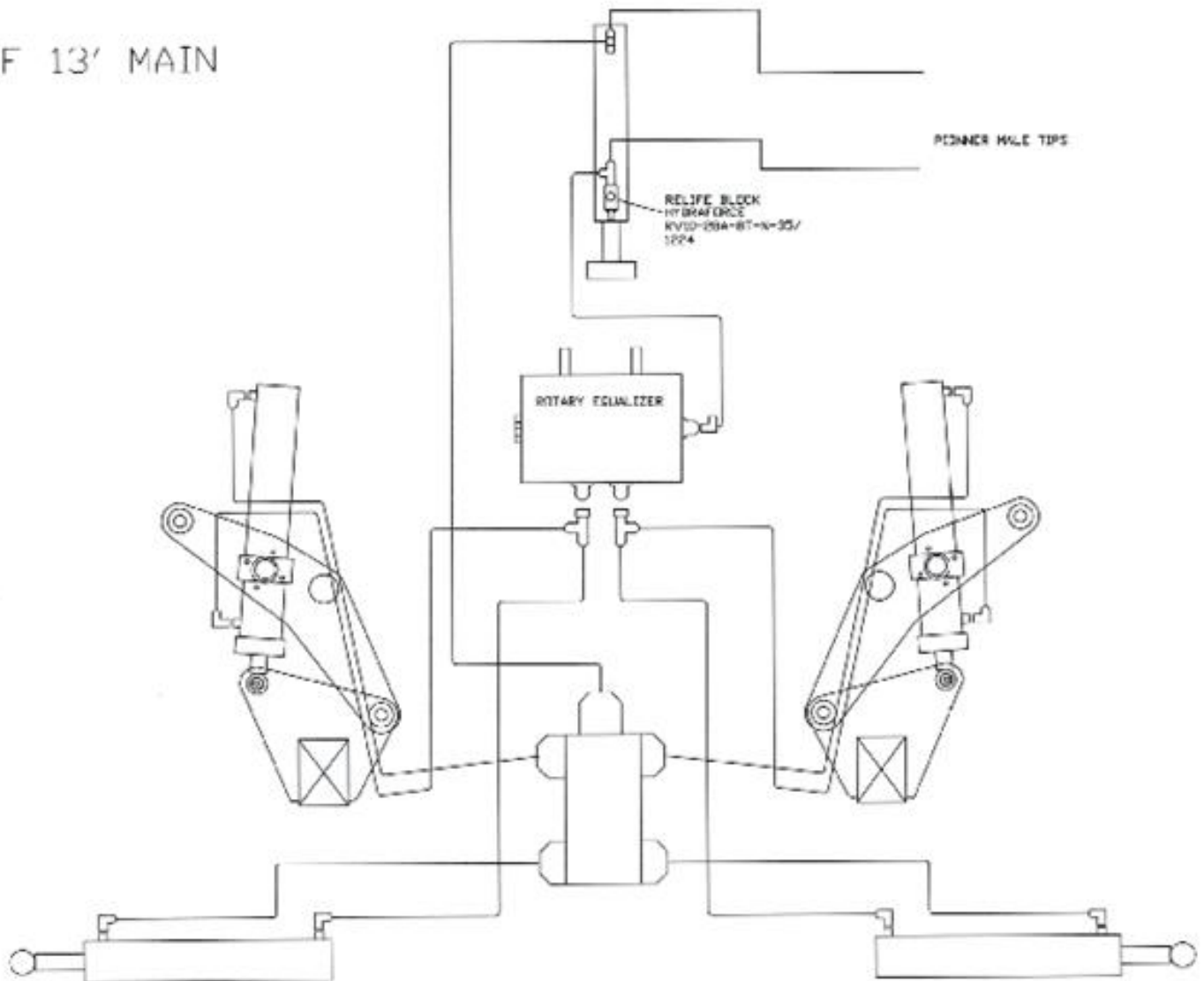
DF TANDEM AXLE MONO FRAME



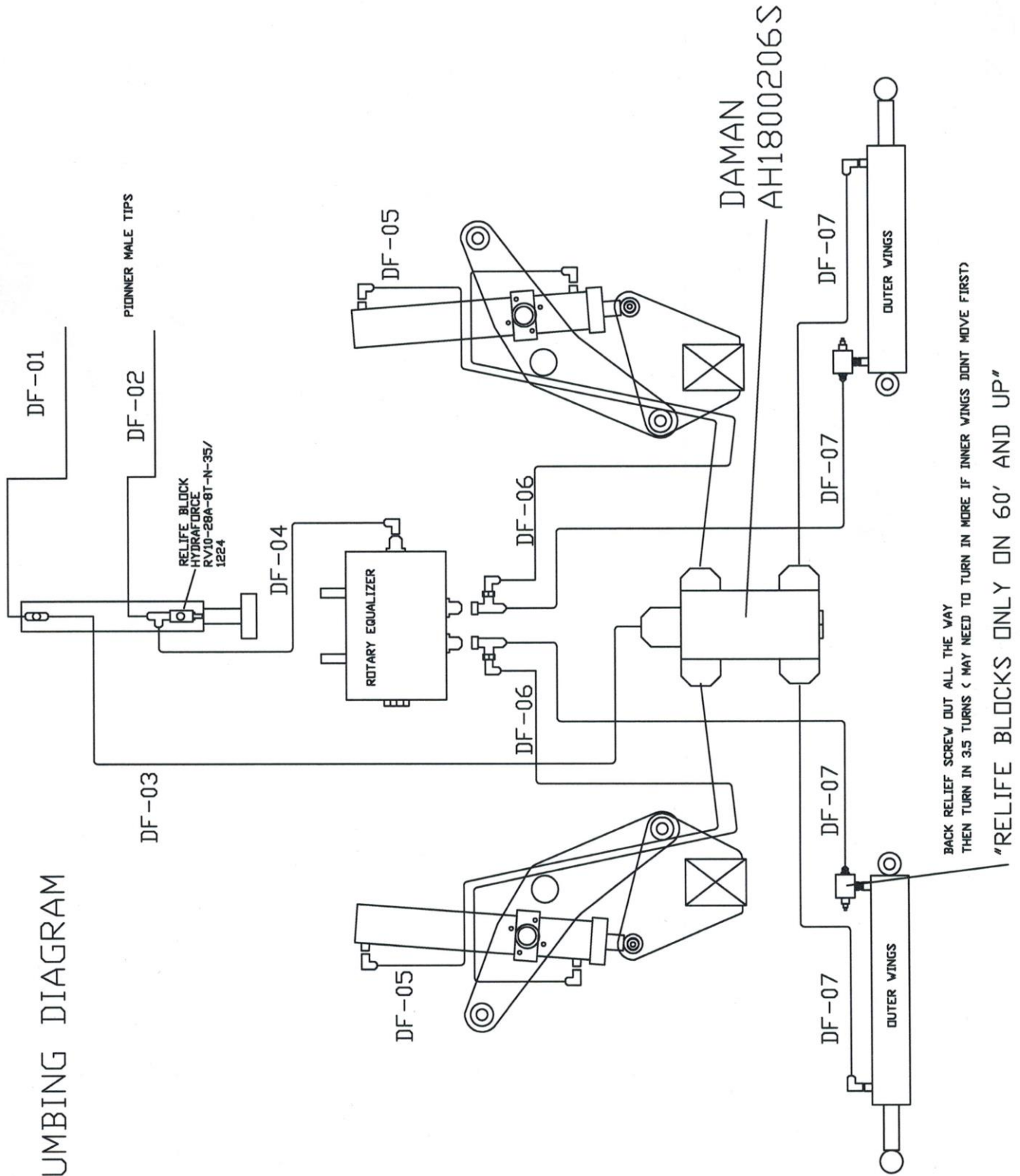
MAIN CYLINDER ASSEMBLY



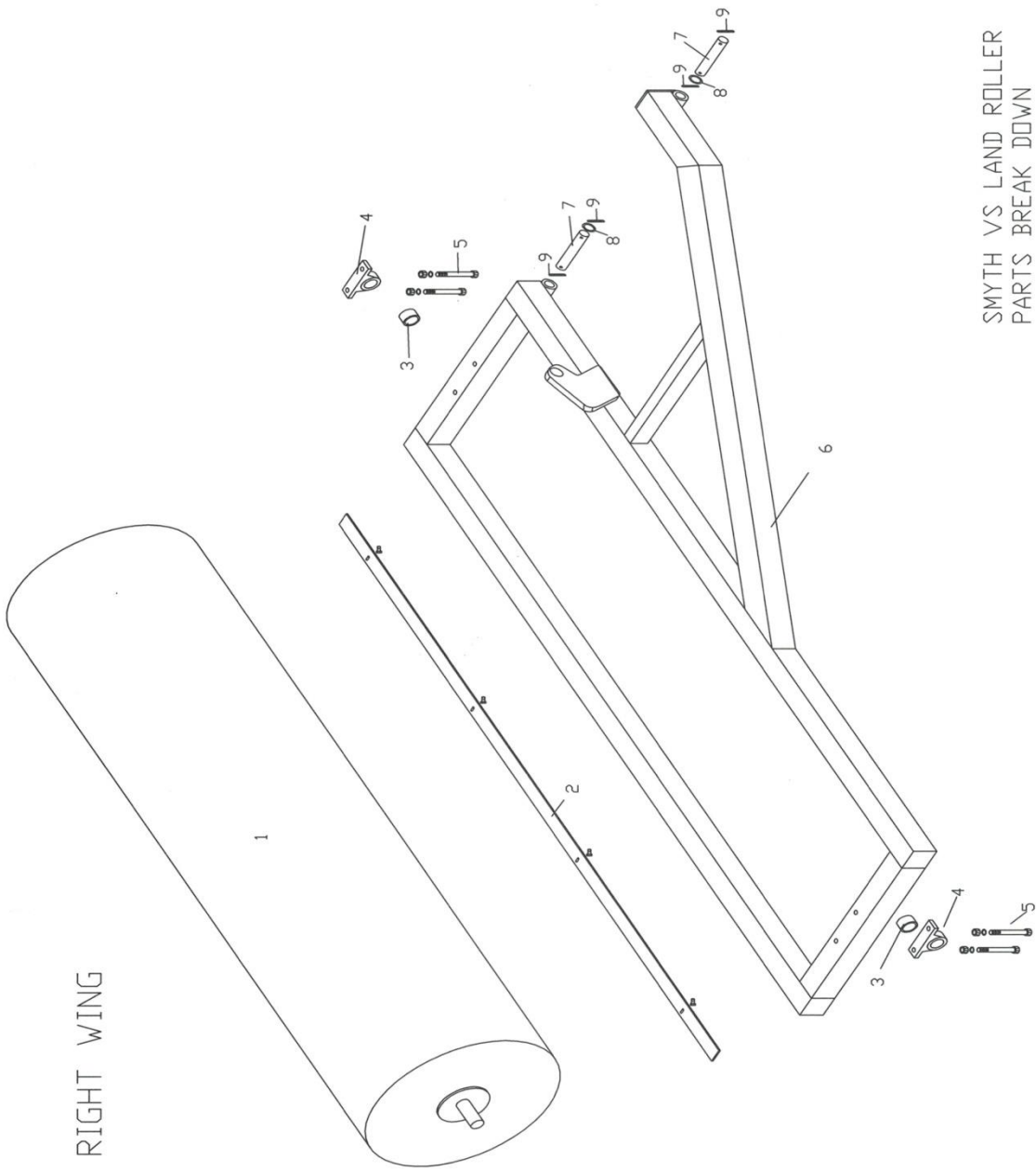
DF 13' MAIN



DF PLUMBING DIAGRAM



VS Parts Breakdown

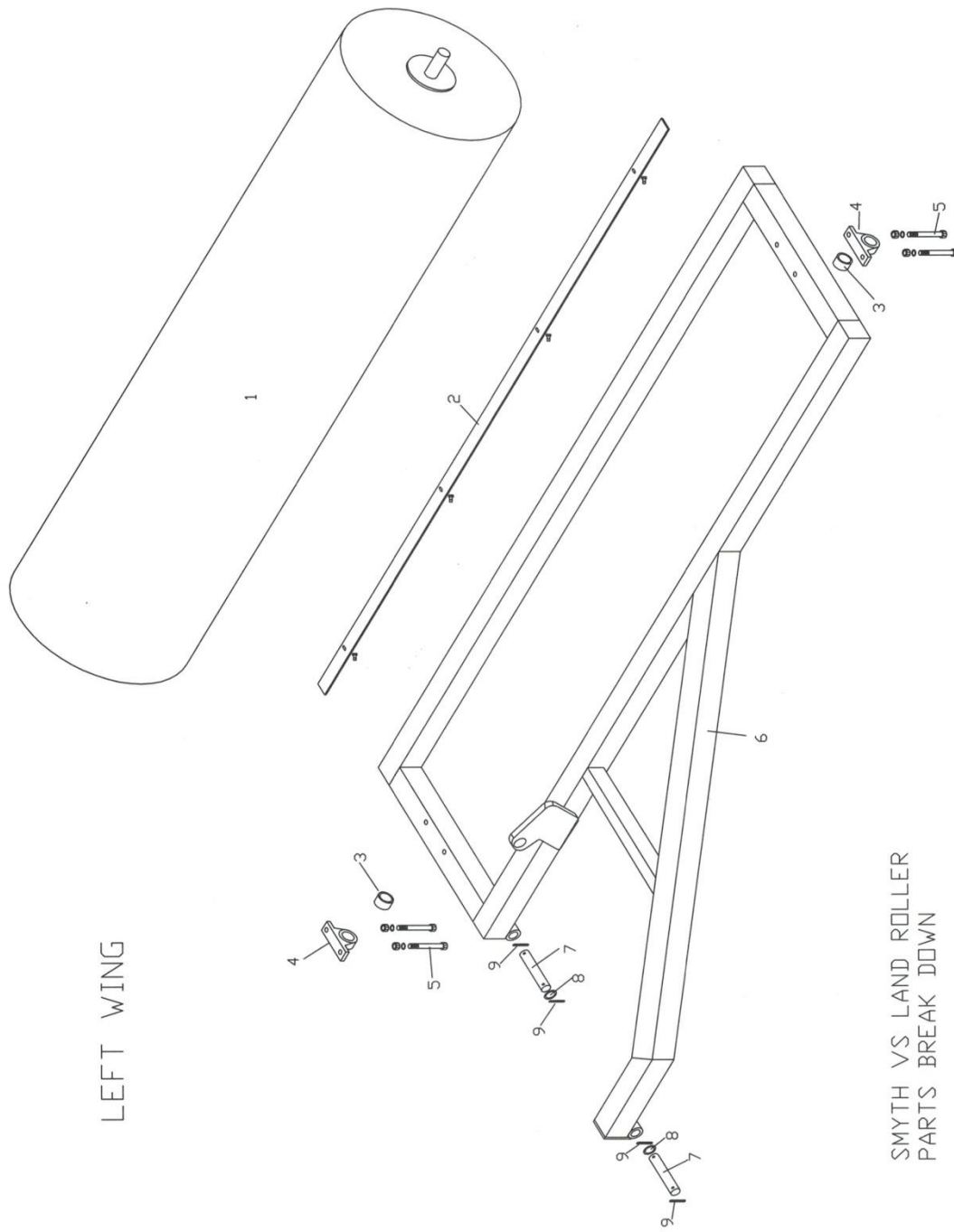


RIGHT WING

- 1. Wing Drum
- 2. Scraper & Hardware
- 3. Spacer
- 4. Bearing
- 5. Bearing Bolts
- 6. Wing
- 7. Wing Hinge Pin
- 8. Machine Washer
- 9. Roll Pins

SMYTH VS LAND ROLLER
PARTS BREAK DOWN

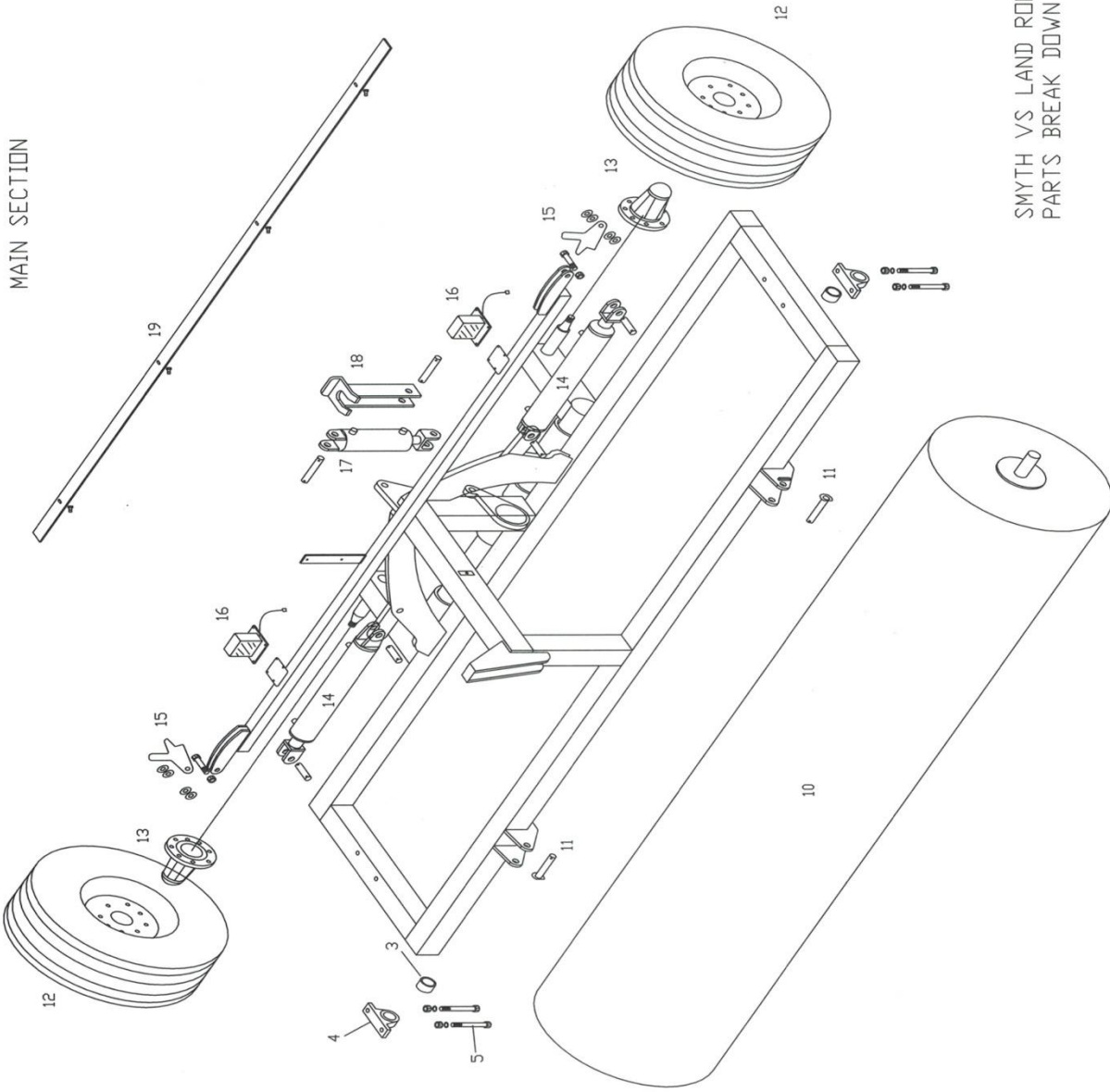
LEFT WING



- | |
|-----------------------|
| 1. Wing Drum |
| 2. Scraper & Hardware |
| 3. Spacer |
| 4. Bearing |
| 5. Bearing Bolts |
| 6. Wing |
| 7. Wing Hinge Pin |
| 8. Machine Washer |
| 9. Roll Pins |

SMYTH VS LAND ROLLER
PARTS BREAK DOWN

MAIN SECTION

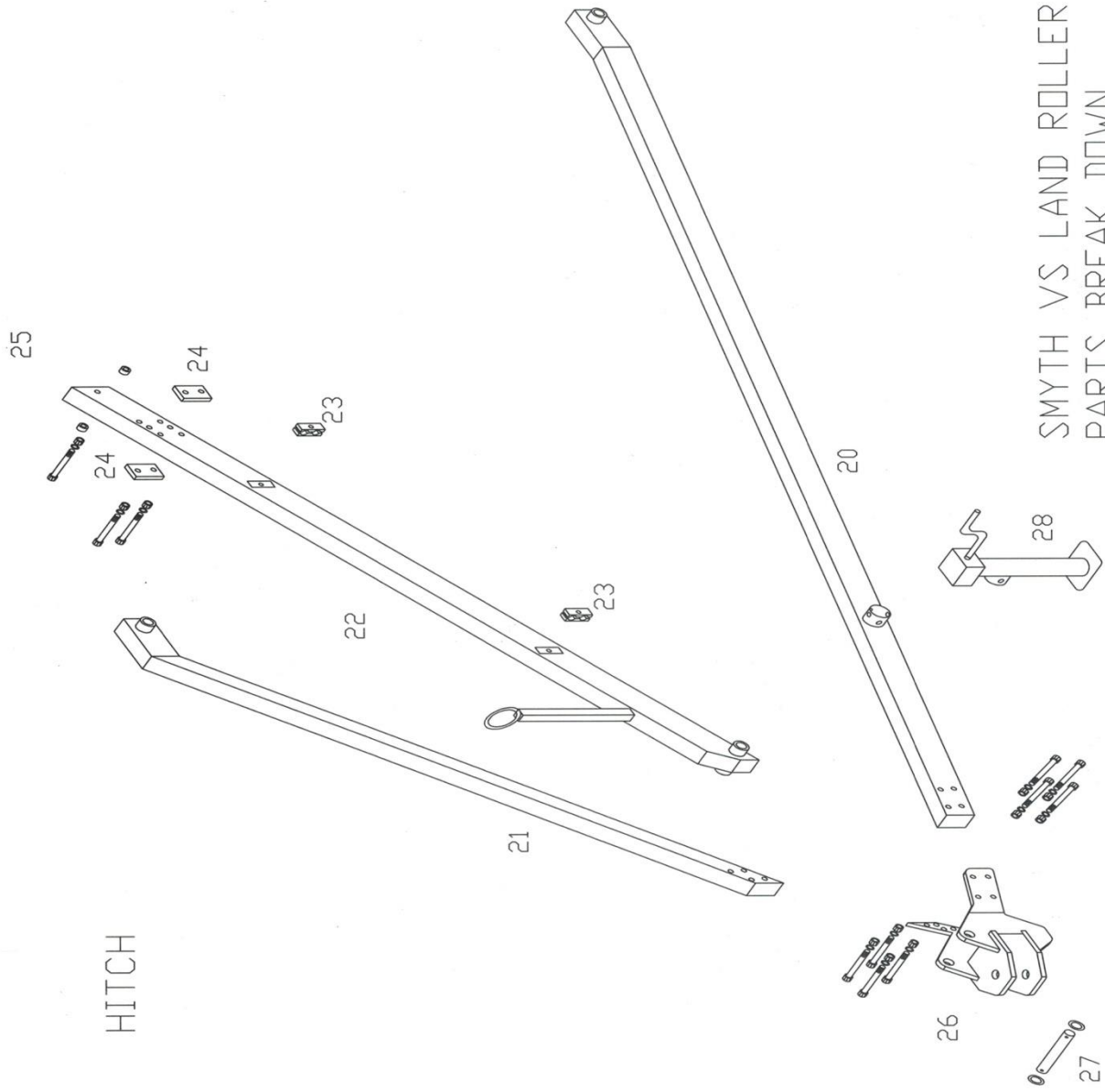


SMYTH VS LAND ROLLER
PARTS BREAK DOWN

- 3. Spacer
- 4. Bearing Bolts
- 5. Bearing Bolts
- 10. Main Drum
- 11. Hitch Pins
- 12. Wheel Assembly
- 13. Hub Assembly
- 14. Wing Cylinders
- 15. Auto Latch & Hardware
- 16. Lights
- 17. Lift Cylinders
- 18. Lift Lock Up
- 19. Scraper & Hardware

HITCH

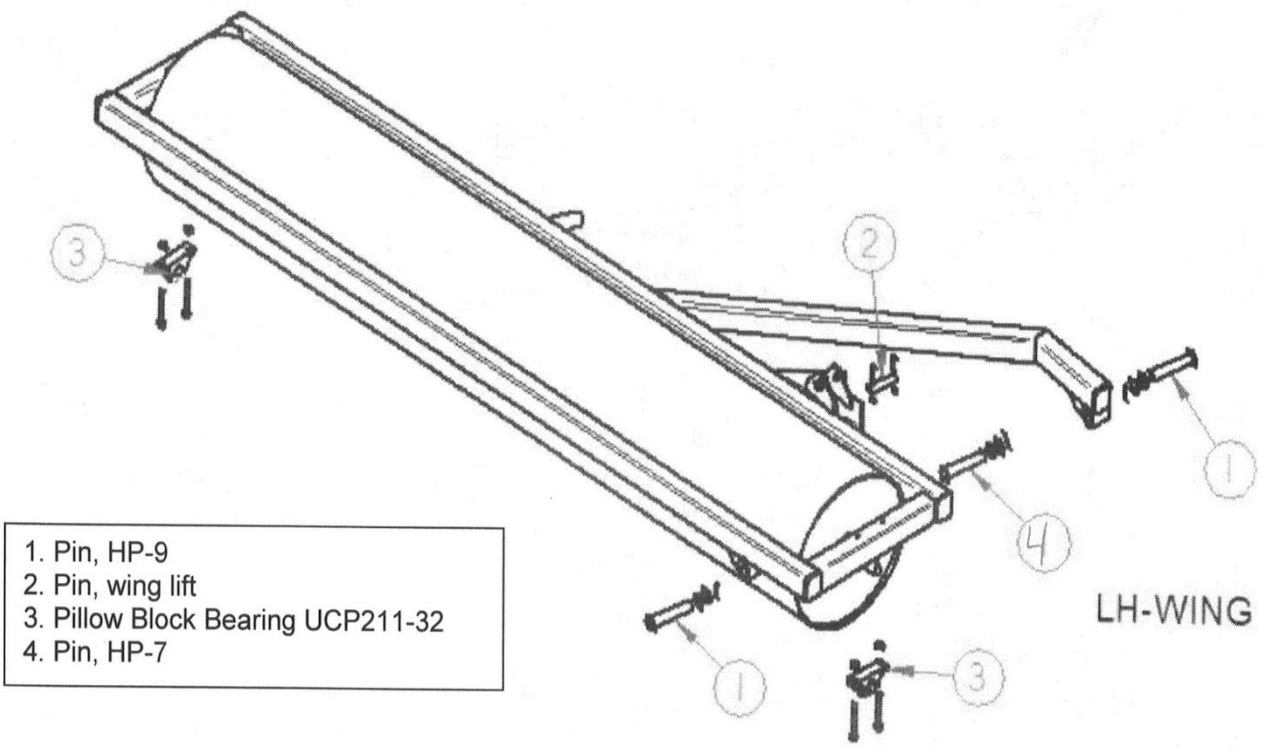
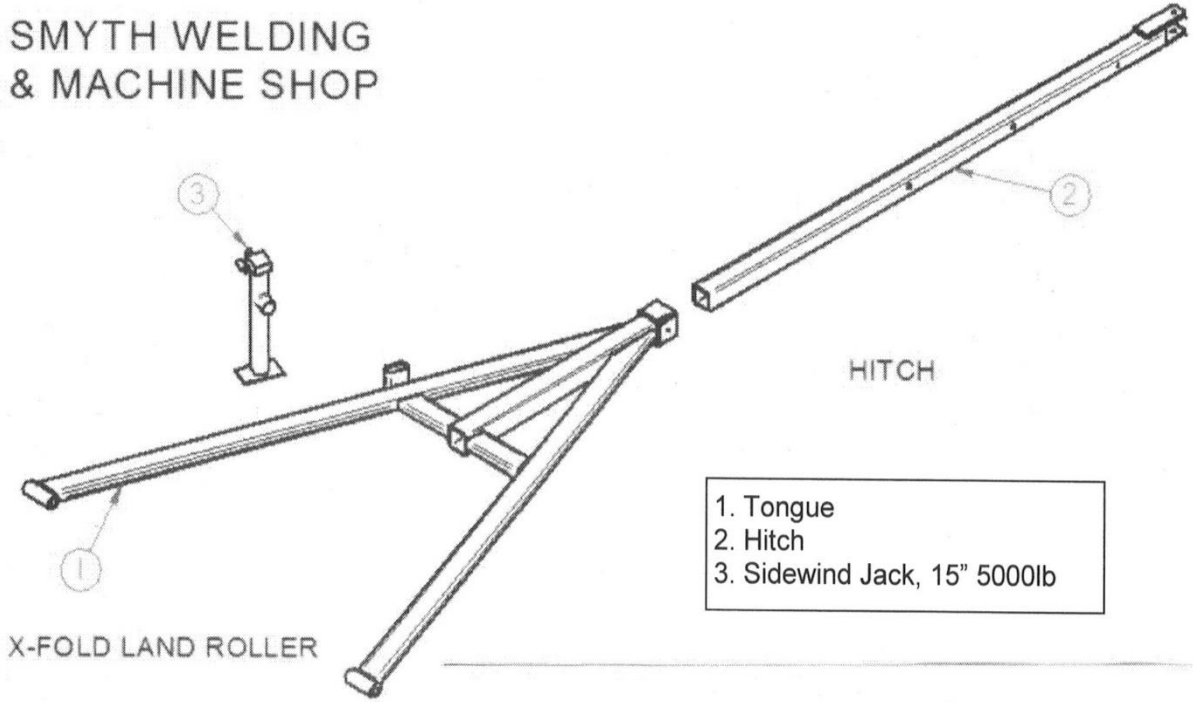
- 20. Left Hitch Arm
- 21. Right Hitch Arm
- 22. Center Hitch Arm
- 23. Hose Clamps
- 24. Stoppers & Hardware
- 25. Stopper Bushings & Hardware
- 26. Hitch Clevis Assembly & Hardware
- 27. Center Hitch Pin
- 28. Jack Stand



SMYTH VS LAND ROLLER
PARTS BREAK DOWN

XS Parts Breakdown

SMYTH WELDING
& MACHINE SHOP



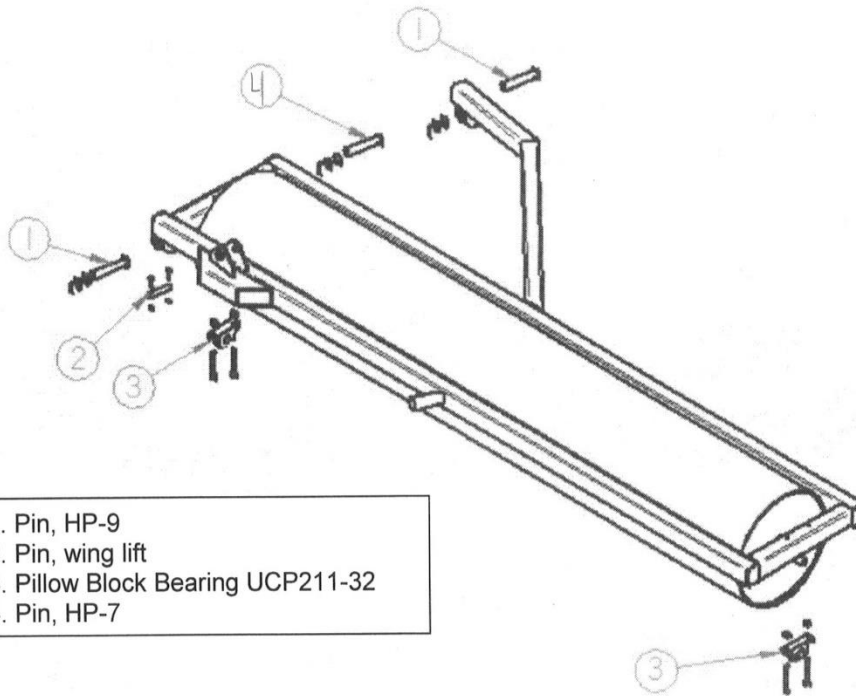
XS Parts Breakdown

SMYTH WELDING
& MACHINE SHOP

- 1. Bolt-on Cylinder Cap
- 2. Wing Lift Cylinder
- 3. Pillow Block Bearing UCPE 211-32

X-FOLD LAND ROLLER

MAIN FRAME



- 1. Pin, HP-9
- 2. Pin, wing lift
- 3. Pillow Block Bearing UCP211-32
- 4. Pin, HP-7

RH WING

