

2000LBS HYDRAULIC ENGINE CRANE

OWNER'S MANUAL



**WARNING:**

- *Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.
- *Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.
- *Do not allow persons to operate or assemble this Hydraulic Engine Crane until they have read this manual and have developed a thorough understanding of how the Hydraulic Engine Crane works.
- *The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

**ADDITIONAL WARNINGS:**

1. DO NOT USE MOTOR OIL IN THE CRANE.
 2. ONLY USE ANTI-FOAMING JACK OIL.
 3. ALWAYS USE A GOOD GRADE HYDRAULIC JACK OIL.
 4. DO NOT USE HYDRAULIC BRAKE FLUID, ALCOHOL, GLYCERINE, DETERGENT, MOTOR OIL OR DIRTY OIL.
 5. USE OF A NON-RECOMMENDED FLUID CAN CAUSE DAMAGE TO A CRANE.
 6. AVOID MIXING DIFFERENT TYPES OF FLUID AND NEVER USE BRAKE FLUID, TURBINE OIL, TRANSMISSION FLUID, MOTOR OIL OR GLYCERIN. IMPROPER FLUID CAN CAUSE PREMATURE FAILURE OF THE CRANE AND THE POTENTIAL FOR SUDDEN AND IMMEDIATE LOSS OF LOAD.
 7. DISPOSE OF HYDRAULIC FLUID IN ACCORDANCE WITH LOCAL REGULATIONS.
 8. DO NOT USE IT FOR INCLINED LIFTING.
 9. DO NOT USE IT WHEN THE VEHICLE OR CRANE IS MOVING.
 10. CHECK THE VEHICLE BATTERY TO MAKE SURE IT'S 12 V DC BEFORE POWER-ON.
 11. MAKE SURE ALL THE CONNECTING POINTS OF THE POWER AND THE QUICK CONNECTOR ARE FIXED FIRMLY AND THAT THEY WORK PROPERLY.
 12. MAKE SURE ALL THE POINTS OF WELDING ARE GOOD BEFORE OPERATION.
 13. PEOPLE ARE NOT ALLOWED TO STAND BENEATH THE CRANE WHEN IT'S WORKING, MAKE SURE THAT THEY ARE IN THE SAFETY AREA.
 14. DO NOT VIOLATE THE OPERATING REGULATIONS.
 15. DO LEAVE FIVE WRAPS OF THE WIRE ROPE ON THE DRUM.
 16. THE MOTOR OF THE WINCH IS PERMANENT MAGNET, IT'S FOR INTERMITTENT USE ONLY, ALLOW THE MOTOR TO COOL DOWN WHEN IT'S HOT RESULTING FROM WORK.
 17. NEVER LIFT OR TRANSPORT PEOPLE USING THE CRANE.
 18. ALWAYS REMOVE JEWELRY AND WEAR EYE PROTECTION.
 19. NEVER LEAN OVER BATTERY WHILE MAKING CONNECTIONS.
 20. ALWAYS VERIFY AREA WHEN DRILLING IS CLEAN OF FUEL LINE, FUEL TANK, BRAKE LINES, ELECTRICAL WIRES, ETC.
 21. NEVER ROUTE ELECTRICAL CABLES:
 - ACROSS ANY SHARP EDGES.
 - THROUGH OR NEAR MOVING PARTS.
 - NEAR PARTS THAT BECOME HOT.
 - ALWAYS INSULATE AND PROTECT ALL EXPOSED WIRING AND ELECTRICAL TERMINALS.
 - ALWAYS INSTALL TERMINAL BOOTS AS DIRECTED IN INSTALLATION INSTRUCTIONS.
 22. NEVER OPERATE THIS WINCH IF YOU ARE UNDER 16 YEARS OF AGE.
 23. NEVER OPERATE THIS WINCH WHEN UNDER THE INFLUENCE OF DRUGS, ALCOHOL OR MEDICATION.
 24. NEVER EXCEED WINCH OR WIRE ROPE RATED CAPACITY. MAX CAPACITY 500KGS.
 25. ALWAYS CHOOSE A MOUNTING LOCATION THAT IS SUFFICIENTLY STRONG TO WITHSTAND THE MAXIMUM LIFTING CAPACITY OF YOUR CRANE.
 26. ALWAYS USE FACTORY APPROVED SWITCHES, REMOTE CONTROLS, ACCESSORIES AND INSTALLATION COMPONENTS.
- HYDRAULIC ENGINE CRANE USE AND CARE**
- *Do not modify the Hydraulic Engine Crane in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the Hydraulic Engine Crane was designed.
 - *Always check of damaged or worn out parts before using the Hydraulic Engine Crane. Broken parts will affect the Hydraulic Engine Crane operation. Replace or repair damaged or worn parts immediately.
 - *Store idle Hydraulic Engine Crane. When Hydraulic Engine Crane is not in use, store it in a secure place out of the reach of children. Inspect it for good working condition prior to storage and before re-use.
 - *Not for use by children or people with reduced mental capacity.
 - *Do not use under the influence of drugs or alcohol.
 - *Ensure children and other bystanders are kept at a safe distance when using crane.
 - *Always use the hole close to the pulley when use the telescopic arm, then the arm will be 1250mm (hole at label).



INSPECTION

*Inspect the crane carefully before each use. Ensure the crane is not damaged, excessively worn, or missing parts.

*Do not use the crane unless it is properly lubricated.

*Using a crane that is not in good clean working condition or properly lubricated may cause serious injury.

*Inspect the work area before each use. Make sure it is free and clear of any potential hazards.

OPERATING INSTRUCTIONS

BEFORE USE

1. Before using this product, read the owner's manual completely and familiarize yourself thoroughly with the product and the hazards associated with its improper use.

2. Perform the air purge procedure. (See previous instructions for system purge procedure.)

3. Check and that the pump operates smoothly before putting into service.

4. Inspect before each use. Do not use if bent, broken or cracked components are noted.

IMPORTANT: It is possible for air to enter the hydraulic system, causing poor lifting performance. Purge any air from the system by fully opening the release valve (turn handle counterclockwise as shown). Then while holding the boom down, operate pump handle rapidly several times.

MAINTENANCE INSTRUCTIONS

If you use and maintain your equipment properly, it will give you many years of service. Follow the maintenance instructions carefully to keep your equipment in good working condition. Never perform any maintenance on the equipment while it is under a load.

Inspection

You should inspect the product for damage, wear, broken or missing parts (e.g.: pins) and that all components function before each use. Follow lubrication and storage instructions for optimum product performance.

Binding

If the product binds while under a load, use equipment with equal or a larger load capacity to lower the load safely to the ground. After un-binding, clean, lubricate and test that equipment is working properly. Rusty components, dirt, or worn parts can be causes of binding. Clean and lubricate the equipment as indicated in the lubrication section. Test the equipment by lifting without a load. If the binding continues contact Customer Service.

Cleaning

If the moving parts of the equipment are obstructed, use cleaning solvent or another good degreaser to clean the equipment. Remove any existing rust, with a penetrating lubricant.

Lubrication

This equipment will not operate safely without proper lubrication. Using the equipment without proper lubrication will result in poor performance and damage to the equipment. Some parts in this equipment are not self-lubricating inspect the equipment before use and lubricate when necessary. After cleaning, lubricate the equipment using light penetrating oil, lubricating spray.

-Use a good lubricant on all moving parts.

-For light duty applications, use lubrication once a month.

-For heavy and constant application, weekly lubrication is recommended.

-NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES!

Rust Prevention:

-Check rams and pump plungers on the power unit assemblies daily for any signs of rust or corrosion.

Without a load, lift the equipment as high as it goes and look under and behind the lifting points. If signs of rust are visible, clean as needed.

How the Long Ram Operates

With release valve closed, an upward stroke of the long ram handle draws oil from the reservoir tank into the plunger cavity. Hydraulic pressure holds the valve closed, which keeps the oil in the plunger cavity. A downward stroke of the long ram handle releases oil into the cylinder, which forces the ram out. This raises the hydraulic ram. When the ram reaches maximum extension, oil is bypassed back into the reservoir to prevent an over extended ram stroke and possible damage to the long ram.

Opening the release valve allows oil to flow back into reservoir. This releases hydraulic pressure on the ram, which results in lowering the hydraulic ram.

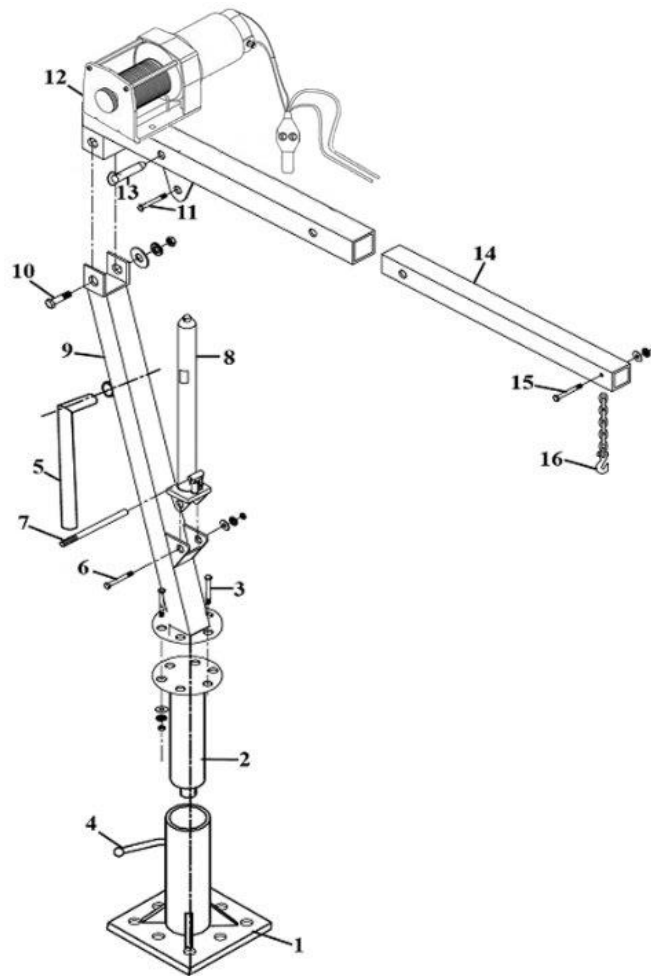
Storing the Crane

1. Lower the Lifting Arm.

2. Place the handle in the upright position.

3. Store in a dry location, recommended indoors.

Note: If the crane is stored outdoors, be sure to lubricate all parts before and after use to ensure the crane stays in good working condition.



ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	BASE	9	POST
2	WHEEL HUB	10	BOLT M16X90
3	BOLT M14X35	11	BOLT M16X80
4	BOLT M14X25	12	BOOM
5	WHEEL WORKING ARM	13	PIN
6	BOLT M16X80	14	BOOM EXTENSION
7	JACK HANDLE	15	BOLT M14X80
8	JACK (3TON)	16	HOOK AND CHAIN