



RALLY TRAILER
MANUFACTURING

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Operations & Maintenance Manual
Gas Hydraulic with Payoff Wheel
(GHRB-6P)



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1.1 Operation and Maintenance Manual

This Operation and Maintenance Manual is designed to guide qualified personnel in the successful operation and maintenance of the gas hydraulic with payoff wheel. Read and ensure there is a full understanding of this manual before proceeding to operate and maintain any equipment.

 WARNING	
	READ THE RELEVANT EQUIPMENT MANUFACTURER'S MANUAL AND THE OPERATION AND MAINTENANCE MANUAL BEFORE OPERATING OR MAINTAINING THIS PRODUCT. FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.

All operation and maintenance are to be supervised by qualified personnel according to local and national safety guidelines and best practices. Rally Trailer Manufacturing does not assume responsibility for workmanship or safety of any third-party service.

1.2 Operation and Maintenance Manual Overview

The following Operations and Maintenance Manual is intended to help qualified maintenance personnel operate and maintain this product. To be an operator of this product, you must have read and understood all sections of this manual and received training on the requirements and responsibilities as outlined. The system shall be maintained in accordance with the instructions and directions in this manual. Deviations from the instructions in this manual will not be authorized without the manufacturer's prior written consent.

1.3 Trailer Specification

GVRW	9,125 lbs
Payload Rating	8,000 lbs
Reel Width	60"
Reel Diameter	120"
Trailer Length	13'
Trailer Width	96"
Tires	231/75R 17.5

Refer to the following figure for the various features listed throughout this manual:

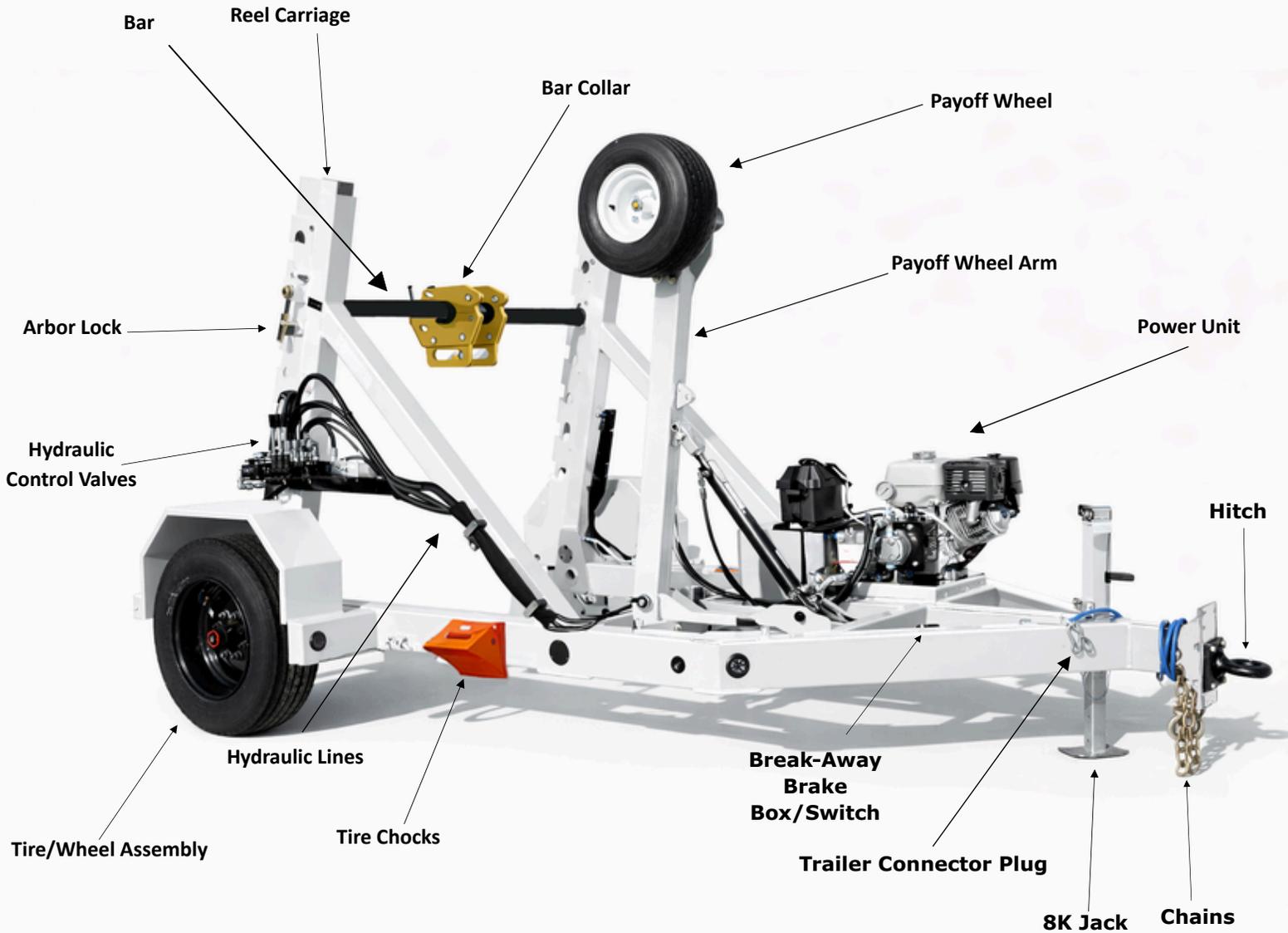


Figure 1: Gas Hydraulic with Payoff Wheel Trailer Feature



Figure 2: Gas Hydraulic with Payoff Wheel Trailer

2.1 Self-Loading Hydraulic Trailer

The trailer is designed so that a single operator can load a wire/utility reel onto the trailer and lift it to provide clearance and allow the reel to operate. This is accomplished through a hydraulic carriage system.

Basic Option

The basic option includes the hydraulic carriage system, operated by an electric hydraulic power unit with an integrated two-button remote.

Before operating the trailer, the following items need to be checked to ensure safe operation of the trailer.

 WARNING	
	Failure to perform safety checks may result in damage to property, injury to self, or death.

3.1 General Condition

Visually inspect the trailer frame, wheels, chains, Jack, and electrical components for significant damage, excessive wear, and material corrosion (e.g., rust). Ensure the general condition of the trailer is fit for operation.

3.2 Lighting and Electrical

Junction Box and Trailer Connector Plug

Visually verify that the trailer connector plug and the wiring to the junction box are in good condition and that there are no exposed or damaged wires. Visually inspect the junction box for damage.

Lighting

Visually inspect that the lights are not damaged. After connecting the trailer connector plug to the vehicle, verify that all lights function correctly for their intended purpose.

Break-Away Brake System

Verify that the break-away brake system is in working condition per the manufacturer's instructions (e.g., the battery is charged and the switch is operational).

3.3 Hydraulic System

 WARNING	
	Visually inspect all hydraulic lines, valves, cylinders, etc. are free of damage and are not leaking. If damage or leaking is found, DO NOT use the trailer until the equipment has been repaired/replaced.

Verify proper operation of the hydraulic power unit, and that all electrical connections and wires are secure and free from damage.

Note: Verify all fluids in the engine are at proper levels before use. If the Auto-Reel option is provided, ensure the gas engine is in working condition per the manufacturer's specification.

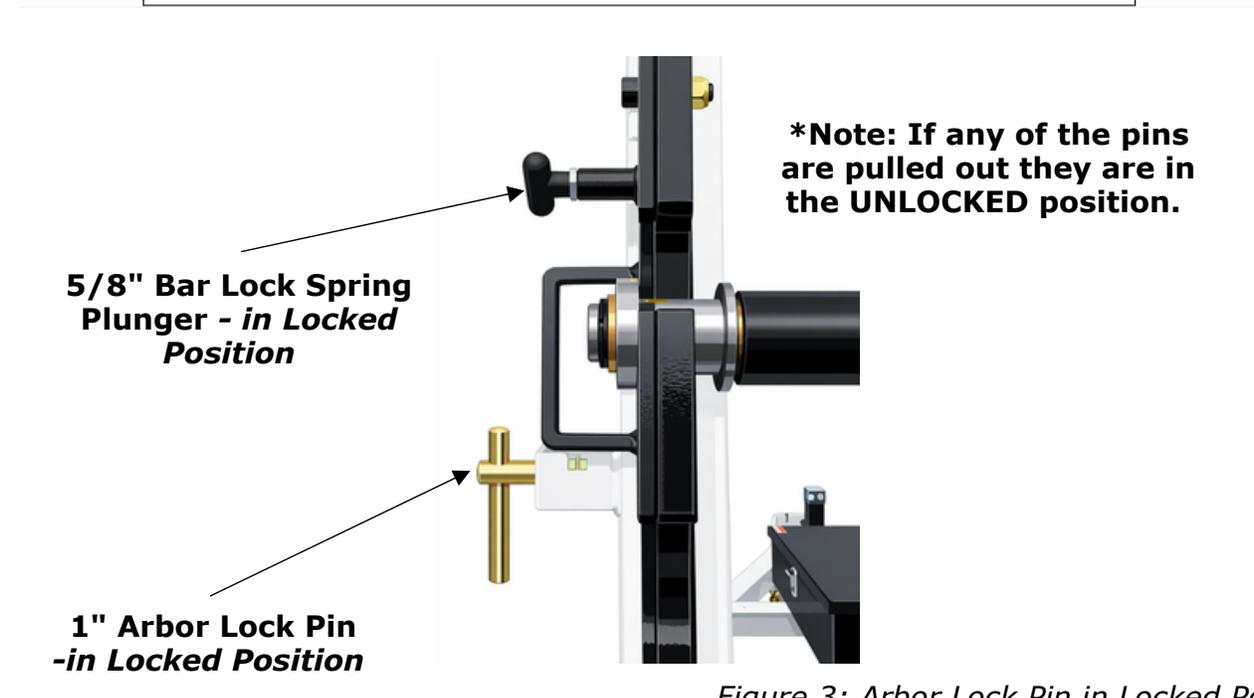
Below is a summary of all procedures specific to operating the trailer.

4.1 Loading-Open Arbor Locks

Pull the 5/8" Bar Lock Spring Plunger (black pin) back, then lift the 1" Arbor Lock Pin (gold pin) to the open position. Allow the 5/8" Bar Lock Spring Plunger (black pin) to lock into the open position. *Note: If the arbor fails to lift evenly, lower the cylinders to the bottom-most position; crack the bottom on each cylinder; and slowly raise the cylinders until air is eliminated from the hydraulic fluid.*

Notice

A quarter turn of the 5/8" bar lock spring plunger will secure the pin in the retracted position.



⚠ WARNING



BAR LOCK SPRING PLUNGER, AND ARBOR LOCK PIN MUST BE IN LOCKED POSITION BEFORE TRAVELING. FAILURE TO LOCK PINS COULD CAUSE DAMAGE TO PROPERTY, INJURY TO SELF, OR DEATH.

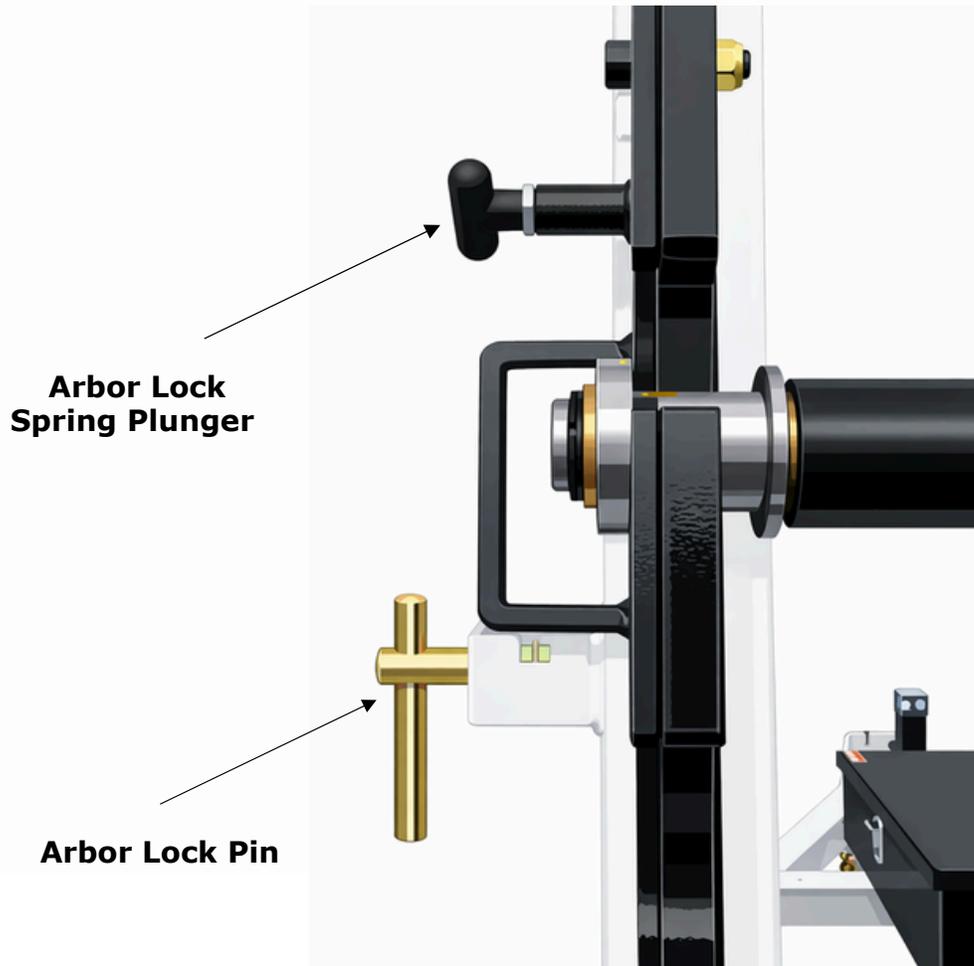


Figure 4: Arbor Lock Pin in Locked Position

Retract Carriage Spring Plungers

Pull Carriage Spring Plungers back and lock in retracted position with a quarter turn. Refer to Fig. 4 for spring plunger differentiation.

Lower Carriage

Use the hydraulic control valves located on the right hand side to lower the carriage. If cylinders do not lower synchronously, allow both to bottom out to reset the synchronization.

**Note: The racks lower to move the carriage downward (not shown in image). Refer to the arrows to indicate rack positions when in the upper position.*

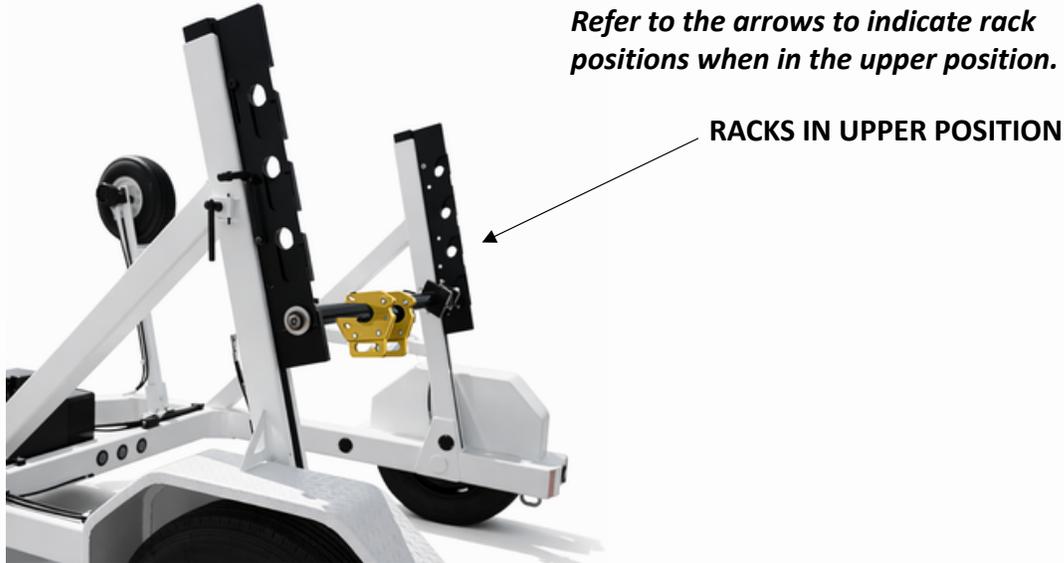


Figure 6: Lowered Carriage Position

⚠ WARNING	
	Be aware of surroundings and keep others away from trailer while raising/lowering carriage.

Insert Bar through Reel

Insert the bar through the reel. Secure the reel position on the bar with the provided bar collars. Ensure the reel/load is centered on the bar.

NOTICE
Keeping the load centered will help keep the hydraulic cylinders synchronize.

Load Bar with Reel onto Carriage

Ensure the arbor and carriage openings are aligned. Load the bar with the reel onto the carriage. Ensure bar flanges straddle both the carriage plate and arbor lock plate without interference.

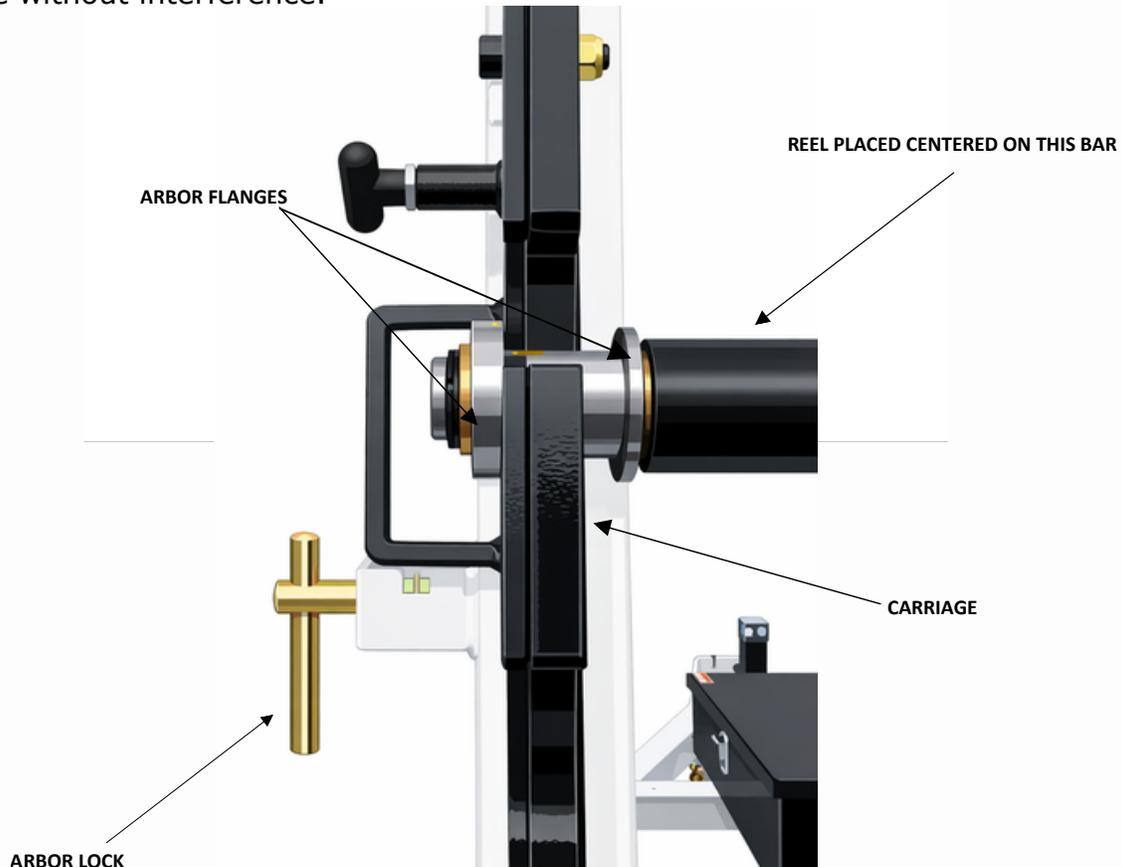


Figure 7: Flanged Arbor End Detail

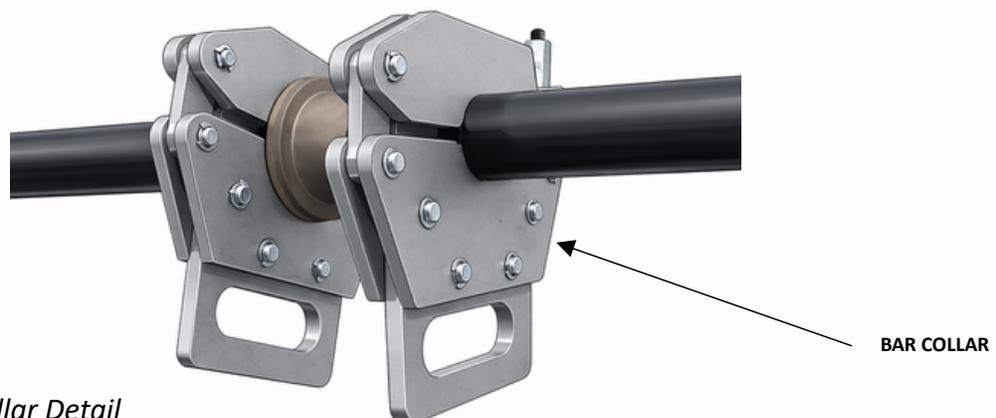


Figure 8: Bar Collar Detail

Lock Arbor Lock

Pull spring plungers back and lower the arbor lock into the closed position. Ensure the spring plunger is not locked in the retracted position and is engaged with the carriage. Both arbor locks must be in place.



Figure 9: Spring Plunger in Locked Position

 WARNING	
	Be aware of hand placement to avoid injury.

 WARNING	
	Failure to lock both arbor locks may result in damage to property, injury to self, or death.

14 Horsepower Power Unit

To operate the 14HP power unit, begin by pushing the black throttle as shown on the lever. Next, turn the key located on the right side of the engine. After completing these steps, the power unit should be running

If the engine has difficulty starting, push the grey choke as indicated.

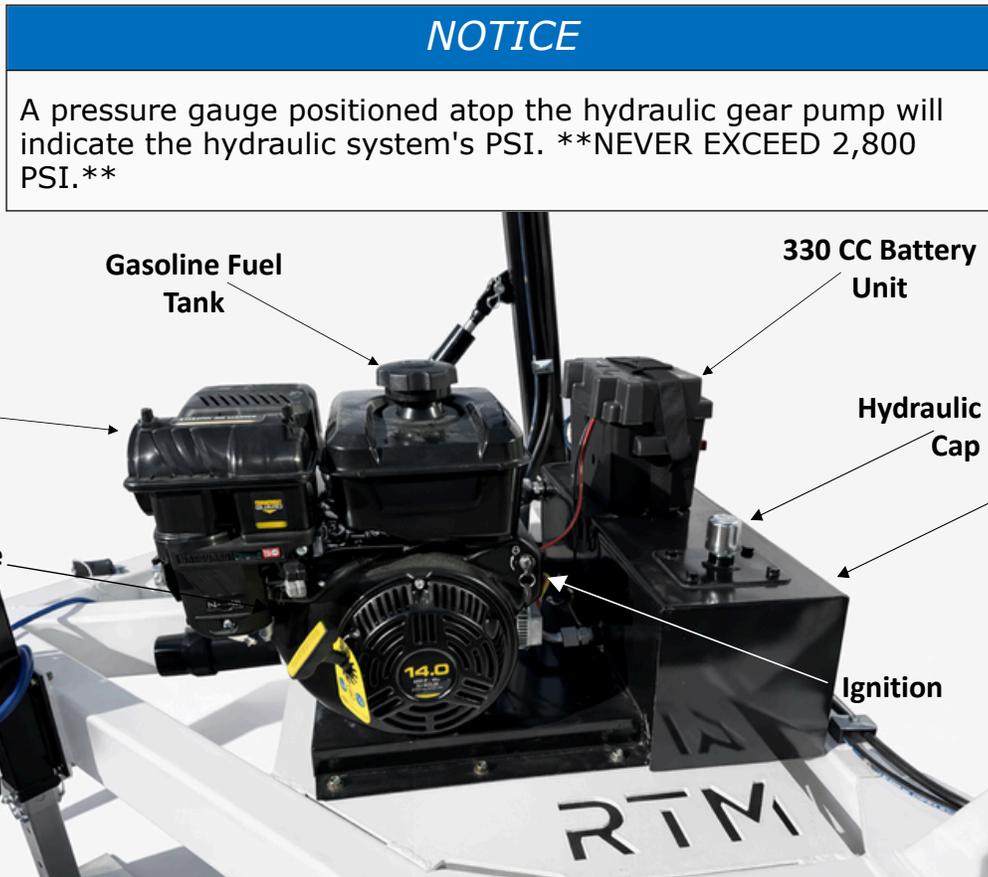


Figure 10: Power Unit Box Detail

	Be aware of surroundings and keep others away from exhaust while running as temperature will rise

Raise Carriage

Use the hydraulic control valves located on the right hand side to raise the carriage with the reel loaded. Some minor unsynchronized movement of the cylinders is to be expected if the cylinders get too unsynchronized; STOP motion upward.

NOTICE

A Pressure Compensated Flow Divider/Combiner is located in the hydraulic line attached to the bore-end nozzle connection of the carriage cylinders.



Figure 10: Hydraulic Control Vavles

⚠ WARNING



Be aware of surroundings and keep others away from trailer while raising/lowering carriage.

Unspooling Reel

To unspool the reel, touch the payoff wheel gently against the reel flange using the arm engagement lever (see page 14).

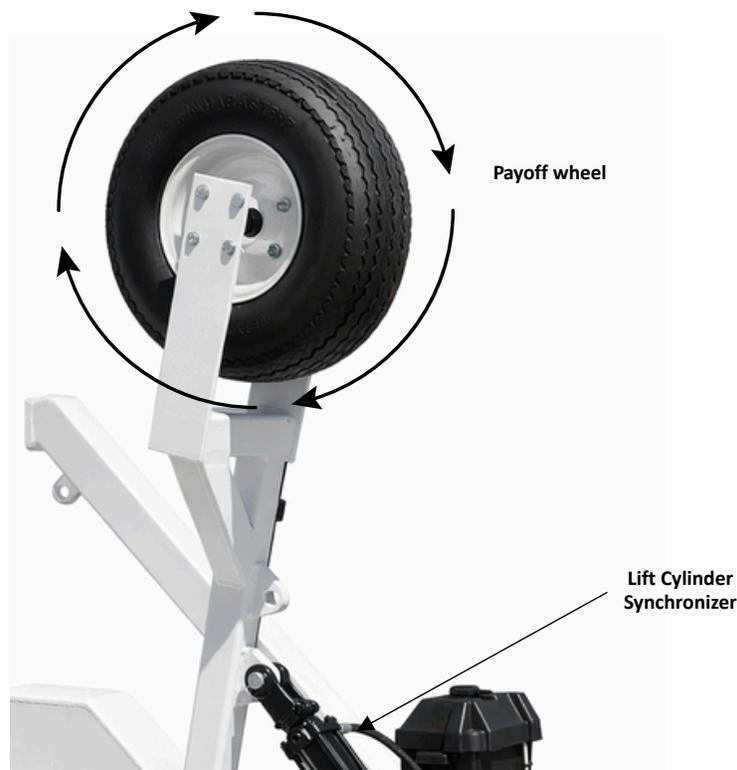


Figure 11: Payoff Wheel

Wheel Functioning

Slowly press wheel lever forward to start to spin reel. change lever directio for opposite rotation

 WARNING	
	When traveling stow reel arm in back position. Never leave wheel against reel flange as this will result in damage to the wheel.

Retract Carriage Spring Plungers

Pull the carriage spring plungers back, then lock them in the retracted position with a quarter turn. If needed, bump the carriage using the pendant/manual directional control valve to remove load from Spring Plungers.

Lower Carriage

Use the hydraulic control valves located on the right hand side to lower the carriage.

 WARNING	
	Be aware of surroundings and keep others away from trailer while raising/lowering carriage.

Disengage Arbor Locks

Pull the spring plunger back, then lift the arbor lock to the open position. Allow spring plunger to lock into open position. Note: A quarter turn of the spring plunger will lock it in the retracted position.

WARNING	
	Be aware of hand placement to avoid injury.

Unload Bar and Reel from Carriage

Remove reel with attached bar from the carriage.

Below is a summary of all maintenance procedures to be performed, along with a schedule for how often these inspections and maintenance should be performed.

5.1 Overall Inspection and Equipment

Inspect all moving parts (e.g., wheels, motors, slides, bearings, etc.) for excessive wear. Ensure proper maintenance per the manufacturer's specifications is being met. Inspect the structural frame of the trailer. Pay close attention to welds, looking for cracks. If damage or corrosion is found, repair and repaint immediately to maintain the frame's integrity.

5.2 Reel Carriage

Inspect the reel carriage for excessive wear and proper lubrication. If lubrication between the sleeves and carriage is needed, use a molybdenum-based lubricant. Ensure clevis pin covers are properly secured.

5.3 Arbor Lock

Verify the arbor lock is in good repair. Ensure shoulder screws are tight and free from damage and excessive wear.

5.4 Spring Plungers

Verify Spring Plungers are operating properly.

5.5 Electrical

Verify that lighting, wiring, and wiring access covers are in good repair.

5.6 Hydraulic Valves

Verify that all fittings and hoses are tightened correctly on hydraulic valves. Ensure there are no cracks or damage to the valve body

Inspection & Maintenance Schedule

An inspection and maintenance schedule has been provided to help ensure the continued safety, reliability, and performance of all equipment. This schedule is designed as a preventative maintenance tool, allowing users to routinely check critical components, identify wear or damage early, and address issues before they result in equipment failure, downtime, or safety hazards.

The schedule outlines recommended inspection intervals—weekly, bi-weekly, monthly, quarterly, annually, and per OEM recommendations—for key equipment components, including but not limited to the frame, reel carriage, arbor lock, spring plungers, electrical systems, lights, wiring, break-away switch, OEM parts, wheels, and motors.

Following these intervals helps maintain compliance with manufacturer guidelines and industry best practices. Users are expected to reference this schedule regularly and document inspections as required. Consistent use of the inspection schedule promotes safe operation, extends equipment lifespan, reduces unexpected repairs, and supports overall operational efficiency.

Equipment	Every Week	Every Other Week	Every Month	Every 3 Months	Every year	Per OEM Recommendations
Frame				X		
Reel Carriage		X				
Arbor Lock	X					
Spring Plungers			X			
Electrical						
Lights	X					
Wires				X		
Break-Away Switch	X					
OEM Parts						
Wheels						X
Motors						X