

# Premium Supply

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## *Hydraulic Trailer Jack and Pump on a Jack*

Operator's Manual and Installation Instructions

**Premium Supply**  
2038 West Interstate 30  
Greenville, Texas  
866-934-0777  
Proud members of:



and



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## INTRODUCTION

This manual covers proper trailer jack hydraulic connections, wiring and service of the Premium Supply hydraulic trailer jacks. **NOTICE: It is the end users responsibility to determine appropriate support member strength and weld size to properly support the load being lifted. Illustrations are for instructional purposes only.**

## IMPORTANT INFORMATION

Jack Model Number:	
Jack Serial Number:	
Pump Installation and Operation Manual Number:	
In Service Date:	
Dealer:	
Address:	
City, State, Zip:	
Dealer Phone Number:	

## **WARRANTY**

### **Standard Warranty:**

Premium Supply warrants your product to be free from defects in material and workmanship for a period of 36 months from the original date of purchase. If you discover a defect in a product covered by this warranty, we will repair at our option using new or refurbished components, or if repair is not possible, replace the item. This warranty is non-transferable.

### **Warranty Extension:**

Premium Supply warrants for 5 years from the date of purchase any of its kits that have the three products listed below in the circuit and have a hydraulic fluid pre-filtration process in place. The hydraulic fluid must be pre-filtered while being put into the hydraulic pump reservoir, with a FPH cleanliness code of at least (ISO 4406) 15/12. All single acting circuits must be plumbed with a hydraulic hose going to both sides of the cylinder. (Contact Premium Supply for instructions on how to implement these quality control measures).

1. KTI power unit (single or double acting, "with a ground wire connected directly from the battery post to the electric motor of the pump")
2. Bridon Load Control Valve (on the load holding port)
3. SP-2 SolarPulse Solar Panel (mounted per our recommendation)

### **Exclusions:**

This warranty covers defects in manufacturing discovered while using the product as recommended by the manufacturer. The warranty does not cover loss or theft, nor does coverage extend to damage caused by misuse, improper installation, abuse, unauthorized modification, improper storage conditions, or natural disasters. This warranty does not cover parts that are subject to normal wear and tear. Paint, finishes or paint preparation done by the customer are not covered under this warranty, nor is deterioration of the paint and appearance caused by normal wear and tear. This warranty becomes void upon modifications not authorized by Premium Supply.

### **Limits of Liability:**

Should the product fail, your sole recourse is repair or replacement, as described in preceding paragraphs. Premium Supply will not be liable to you or any other party for damages resulting from failure of the product. Damages not covered by this warranty include, but are not limited to, lost profits, lost savings, damage to other equipment, incidental or consequential damages arising from the use or inability to use this product. In no event will Premium Supply be liable for more than the amount of your purchase price, not to exceed the current list price of the product and excluding tax, shipping and handling charges. By using this product, user accepts all terms stated herein.

Premium Supply reserves the right to make improvements to any model or product without notice. This warranty supersedes all previous warranties written or implied.



## SAFETY FIRST



This symbol is used to call attention to instructions concerning personal safety. Be sure to observe and follow these instructions. Take time to be careful!

A brief description of signal words that are used in this manual follows:



**DANGER** indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.



**WARNING** indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury and includes hazards that are exposed when guards are removed.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It is also used to alert against unsafe practices.

## SAFETY SIGN LOCATIONS



Read all safety signs on the trailer and in this manual. Keep these signs clean and replace any lost or destroyed signs.

## SAFETY PRECAUTIONS

### **WARNING**

Installing or operating this equipment without first understanding proper installation and operation procedures could lead to serious injury or death. Always read and fully understand all installation and operation manuals before installing or operating this equipment. Contact Premium Supply with any questions.

### **WARNING**

Damage to brake lines during manufacturing and installation of the jack, as well as installing any hardware (bolts, nuts, brackets) in a way that they may rub and damage the brake system, could lead to brake failure. This can cause an accident that could cause injury or death. ALWAYS take adequate steps to prevent brake system damage during installation of the jack, and take precaution to ensure that installed equipment does not interfere with brake system.

### **WARNING**

Malfunctioning equipment could cause property damage, injury or death. ALWAYS have faulty equipment repaired before continuing use. Consult the trailer manufacturer if required.

### **WARNING**

Welding, oxy-fuel cutting, or grinding could cause fuel to ignite. This could lead to injury or death. ALWAYS take adequate steps to avoid the ignition of fuel from fuel tanks when welding, oxy-fuel cutting, and/or grinding during installation.

### **WARNING**

Heat from the vehicles exhaust system could cause hydraulic component failure. This could lead to a fire that can lead to injury or death. ALWAYS install equipment in locations where the exhaust system heat will not damage any components critical to operation.

## DUAL OR SINGLE ACTING HYDRAULIC POWER UNIT INSTALLATION

Mount HPU (hydraulic power unit) in a weather tight enclosure on the trailer. See additional instructions supplied with the Jack for mounting, electrical, wireless remote and hydraulic fluid requirements.



**CAUTION** If hydraulic components other than those supplied by Premium Supply are used in the hydraulic circuit, it is the purchaser's responsibility to verify that the components are compatible with the components supplied by Premium Supply. Incompatible components may cause failure of the jack that, in turn, may cause damage to the trailer, vehicle, other property, and may cause human injury or death.

### **WARNING**

Connecting the jack to a hydraulic system with more pressure (PSI) or flow (GPM) than is recommended by Premium Supply could cause the jack to fail during operation. This could lead to damage, serious injury, or death. Be sure you have correct pressure and flow before operation. Consult Premium Supply if you are unsure about your hydraulic system.

### **WARNING**

Adjusting the hydraulic pressure to more than the recommended setting could cause the jack to fail during operation. This could cause damage, serious injury, or death. NEVER adjust the pressure on your own. Consult the trailer manufacturer if the hydraulic pressure is in question. Only qualified personnel should adjust the hydraulic pressure. NEVER adjust the pressure to more than the recommended amount.

## Hydraulic System Pre-Operation

The hydraulic system supplied with the trailer jack manufactured by Premium Supply consists of components (pump, valves, reservoir, hoses, cylinder, etc.) that are designed to be compatible with each other.

All Premium Supply's trailer jack liability and warranty will be voided if determined by Premium Supply that substituted hydraulic components were used that were incompatible with those supplied by Premium Supply.

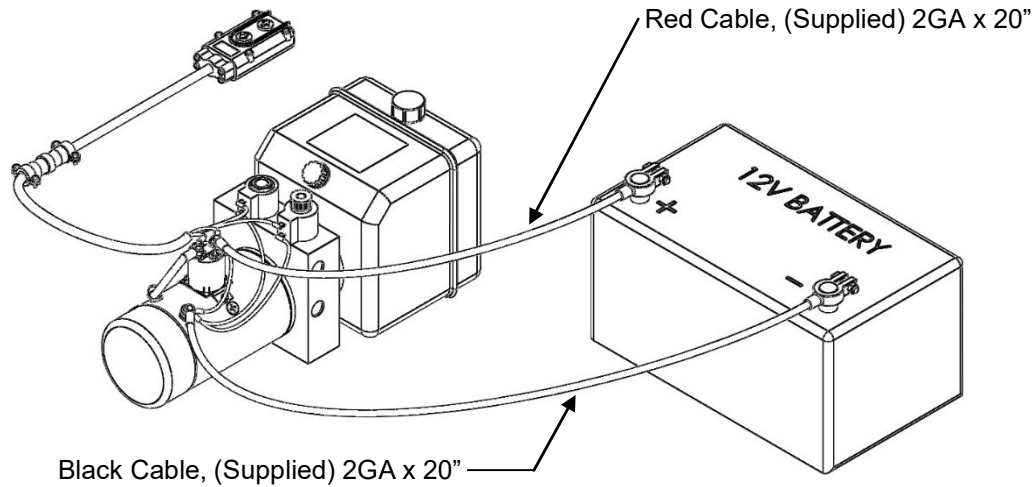
Jack hydraulic parameters are shown on the following pages. These are listed as a general guide to ensure proper compatibility (when using other hydraulic components). If you have any questions, please contact Premium Supply.

## BATTERY HOOKUP DOUBLE ACTING Jack



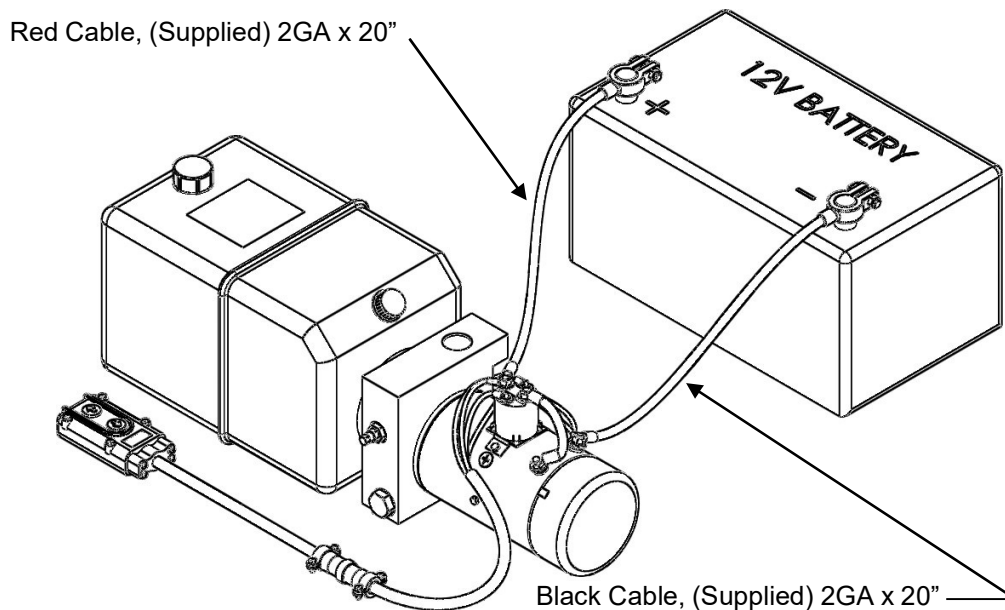
Shorting of the electrical system could cause a fire or equipment damage that could lead to injury or death. ALWAYS disconnect the battery prior to installing, servicing, or repairing power unit.

Mount battery in a weather tight enclosure on the trailer. See additional instructions supplied with the HPU for mounting, electrical and hydraulic fluid requirements.



It is highly recommended that the trailer battery be kept charged using one of the Pulsetech products shown on Premium supply website at [www.premium-supply.com](http://www.premium-supply.com)

## BATTERY HOOKUP SINGLE ACTING Jack





## PUMP ON A JACK

### PARTS INCLUDED WITH PUMP ON A JACK

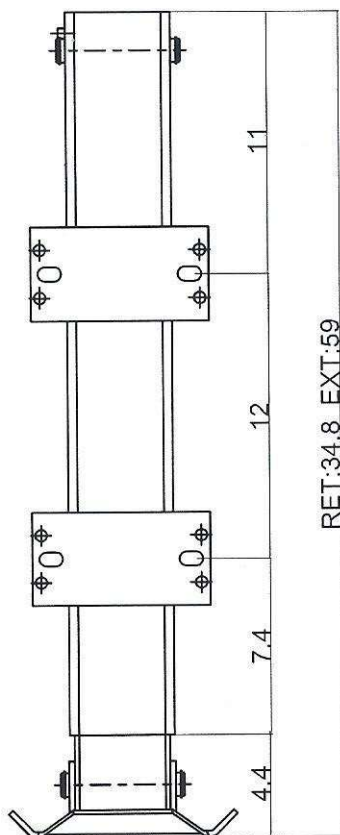


### SPECIFICATIONS

Power .....	12VDC
Maximum Load (Static) .....	12,000 Lbs.
Maximum Load (Raising) .....	10,000 Lbs.
Maximum Hydraulic Flow .....	2.0 GPM
Maximum Hydraulic Pressure Extending.....	3200PSI
Maximum Hydraulic Pressure Retracting .....	1500PSI
Required Hydraulic Oil .....	2 Quarts
Required Oil Type .....	ATF Type F
Maximum Jack Stroke .....	20 inches
Max #2 electrical wire length for acceptable voltage drop .....	10 feet

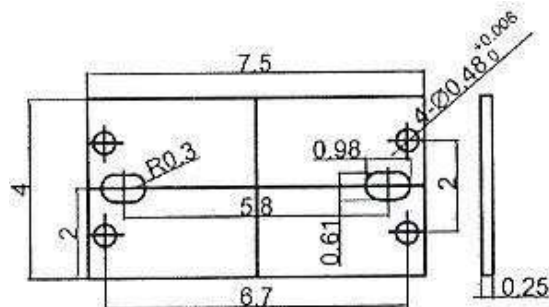
## MOUNTING DIMENSIONS

Bolt to trailer frame using the mounting bracket locations as it works for your specific application (hardware not included). (For direct weld applications follow ASTM for welding to carbon and low alloy steel tubes. Weld per specific application. Weld however should not exceed 1" from the top of the outer tube nor 1" from the bottom of the outer tube.



Dimensions in these drawings are in inches.

### Bracket dimensions



After bolting the jack to the trailer:

With supplied hardware attach the housing and unit to the jack.

Up body hose is attached to extend port "raising" on hydraulic jack (bottom port on jack). (hose supplied) Attach other end to Port A of Jack unit. Torque both connections to 18 ft lbs.

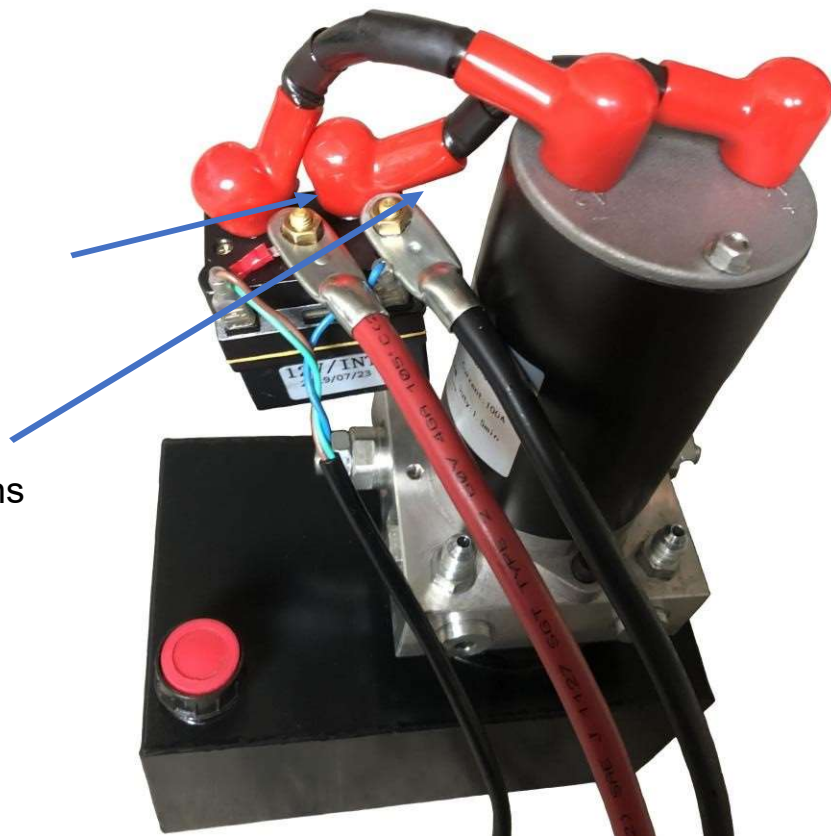
## BATTERY HOOKUP AND OIL FILL LOCATION

Down body hose is attached to retract port “lowering” on hydraulic jack (upper port on jack). (hose supplied) Attached other end of hose to Port B of Jack unit. Torque both connections to 18 ft lbs.

Using full size deep cycle RV/Marine battery (not supplied) run battery positive (red) and negative (black) battery cables (not supplied) to the Jack unit. Should also install insulating boots (not supplied) after connecting battery cables to HPU Unit.

Positive electrical supply  
(red) Battery connections  
torque  
to 3 ft lbs

Negative electrical supply  
(black) Battery connections  
torque to 3 ft lbs



### **⚠️WARNING**

Shorting of the electrical system could cause a fire or equipment damage that could lead to injury or death. ALWAYS disconnect the battery prior to installing, servicing, or repairing power unit.

Mount battery in a weather tight enclosure on the trailer. See additional instructions supplied with the Jack for additional electrical and hydraulic fluid requirements.

See top of reservoir for instruction to ensure optimum performance and system life. **Do not use biodegradable hydraulic fluid. Do not mix hydraulic fluids.**

### Battery Cables

To minimize voltage drop, increase the gauge size of the battery cables as the length of the positive and ground cables increase. Low voltage will cause the motor to run higher amps causing damage to other electrical components.

Cable Length	Wire Gauge	Nominal OD (in.)
1 to 2 feet	4 gauge	0.43
3 to 4 feet	2 gauge	0.49
5 to 7 feet	1 gauge	0.56
8 to 9 feet	1/0 gauge	0.61
10 to 12 feet	2/0 gauge	0.66
13 to 15 feet	3/0 gauge	0.72
16 to 19 feet	4/0 gauge	0.78

### Bleed Cycle Instructions

- Remove the breather cap to view the hydraulic fluid while operating the hydraulic power unit
- Press the up button on the remote pendant and run hydraulic jack or hoist cylinder 1/3 of the way up. You may see fluid returning into the reservoir. If you see air pockets or aeration of the fluid, stop and allow the fluid to settle and continue to raise 1/3 way up.
- Once 1/3 of the way up, press the down button to return fully seated position of the hydraulic jack or hoist cylinder.
- Make sure the fluid level does not drop below the half full level of the reservoir while running the power unit
- Press the up button again on the remote pendant and run hydraulic jack or hoist cylinder 2/3 of the way up. Once 2/3 of the way up is reached, press down button on the remote pendant to a fully seated position again.
- Again make sure the fluid level doesn't drop below the half full level of the reservoir
- Press the up button again on the remote pendant and run hydraulic jack or hoist cylinder to full stroke
- While running and if you see any air pockets or aeration of the fluid in the reservoir, stop and let the fluid settle, then continue to raise the hydraulic jack or the hoist cylinder
- You may have to repeat this process more than once to completely purge all the air out of the system

## 15K Hydraulic Jack Operation and Maintenance

Before operating hydraulic jack, make sure trailer is on a flat/even surface. Make sure that surface is capable of holding the weight of the trailer.

Do not lubricate tubes on jacks. It can attract dirt which could affect operation of jack.

After all steps are completed, using supplied hardware attach the front metal panel over Jack housing.

### Troubleshooting

If jack is not extending or retracting check the following:

- Make sure all electrical connections are secure and battery is fully charged and grounded.
- Make sure hydraulic fluid is flowing from the Jack unit and through the lines. Check to make sure there are no leaks or pinch points in the hoses and all hydraulic connections are secure.
- If jack retracts after leveled to desired location, check fluid level in the Jack unit and all connections are secure.