



# **HPU / Remote Pendant – Control Switch Installation and Operation Instructions**



Pacific Rim International, LLC  
19120 SE 34<sup>th</sup> Street., Suite 105  
Vancouver, WA 98683  
Phone: 360-859-3828

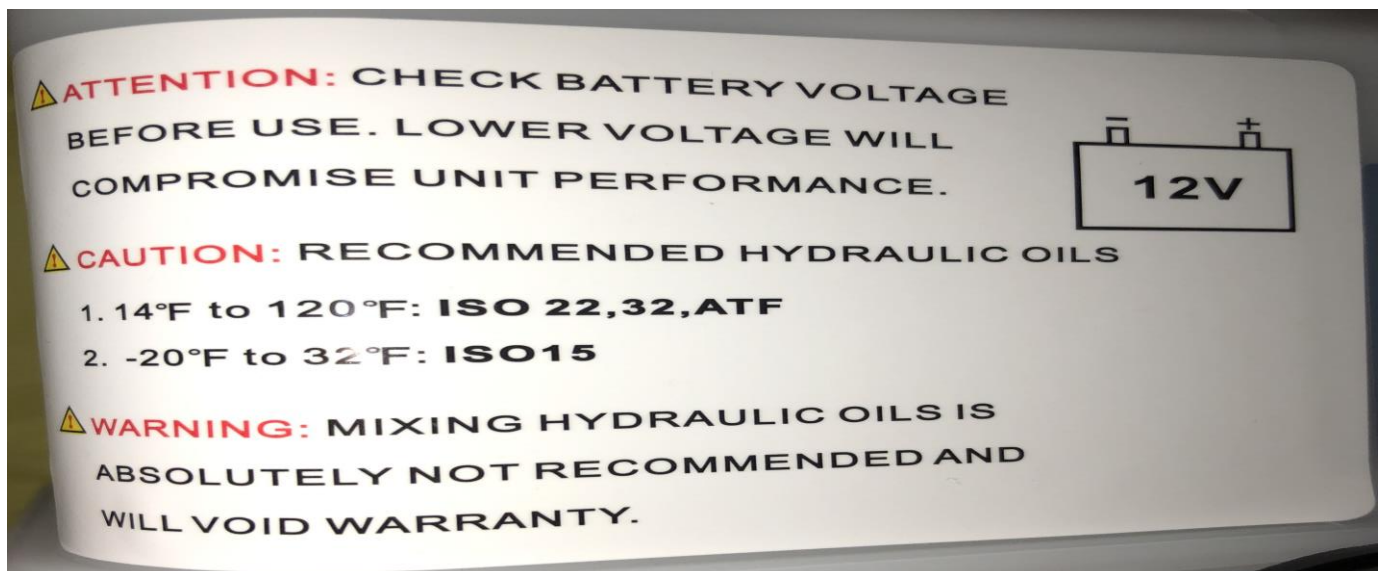
# Installation Instructions For 12 VDC, Hydraulic Power Units, Double Acting (Power Up / Powder Down)

Please refer to photos in following pages:

- Install 9/16-18 SAE ORB, SAE #6, hydraulic fittings in ports A and B. Torque fittings to 18 ft lbs.
- Mount the power unit using two 3/8-16 x 3/4 mounting bolts (not included)
- Connect hydraulic lines. Port A is up body/raising port line and Port B is the down body/lowering port line
- Remove the filler/breather cap and fill the reservoir with hydraulic fluid approximately 1" from the top (see hydraulic fluid recommendations)
- Connect the battery ground cable to the ground terminal of the DC motor using 3 ft lbs of torque
- Connect the positive cable from the battery to the start solenoid and torque to 3 ft lbs of torque (see battery cable recommendation based on cable length from motor to battery)
- Connect the remote pedant/power switch unit using the quick connects provided
- Keep an eye on the fluid level in the reservoir when operating the power unit. Insure the that the fluid level doesn't go lower than 1/2 full during initial startup. When the cylinder is fully extended on the jack and/or hoist reservoir should be about 1/2 full.
- See bleed cycle procedure when operating the hydraulic system for the first time. Air will be induced into the system and that air needs to be removed.
- If needed refill the reservoir so it is approximately 1" below the top of the reservoir
- Replace the fill/breather cap
- Best to store the remote pendant/power switch in the tow vehicle when not in use to help preserve this piece

## Do not mix hydraulic fluids

It is recommended to use a premium hydraulic oil to ensure optimum performance and system life. See top of reservoir for instruction. **Do not use biodegradable hydraulic fluid with buna seal.**



## 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

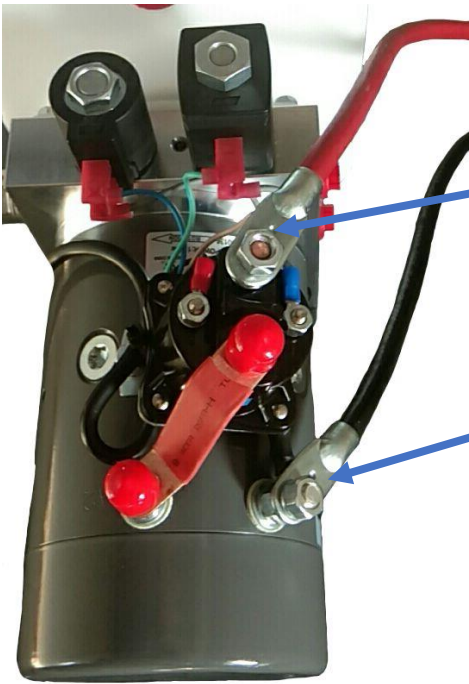
## Bleed Cycle Instructions

- Remove the breather cap with dip stick in order 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

Breather/Fill  
Cap

Port A

Port B



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

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

Quick Connect Remote Pendant to HPU unit

Line up ends on quick connect with  
indentation

After plugging two ends together thread  
connection cup the twist until tight

