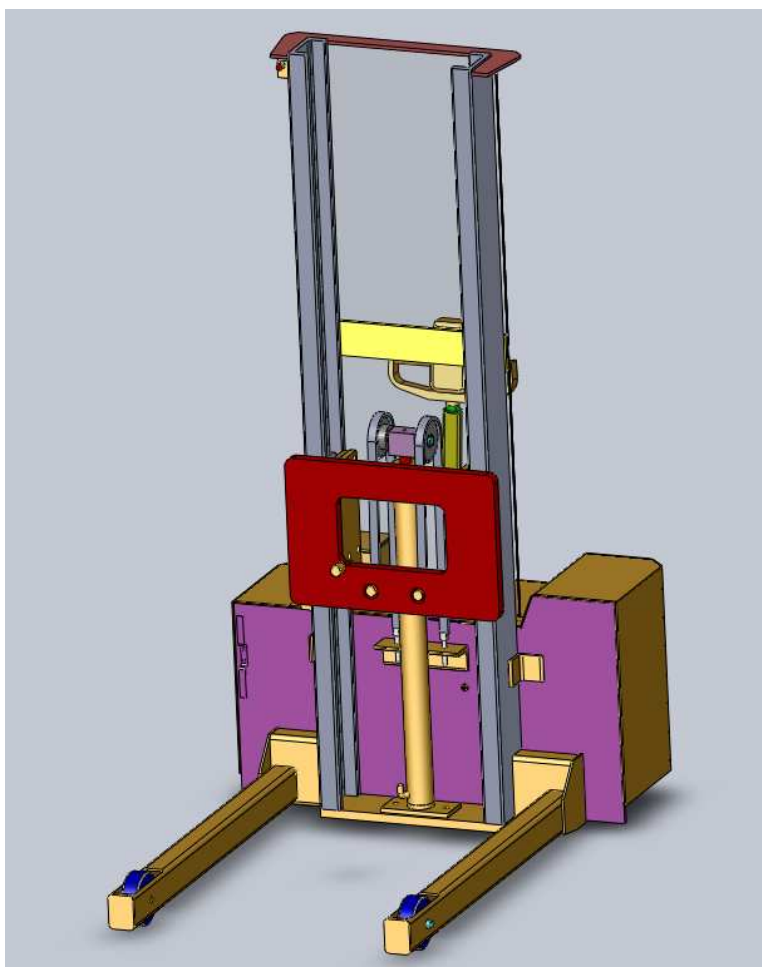


**ECONO LIFT**

**ERGONOMIC PRODUCTS**

**Operation and Maintenance manual for**  
**POWERED STRADDLE ERGO WORK POSITIONER**



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## Introduction

This manual attempts to provide all of the information necessary for the safe and proper installation, operation, maintenance and trouble shooting of Econolift **PSEWP SERIES POWERED STRADDLE ERGO WORK POSITIONER**.

The **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** has a nameplate, which provides the load capacity (lbs), serial number, and date of manufacturing. Please refer to these numbers when ordering parts, or requesting further information.

### **Safety**

Do not install or operate this **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** **without** carefully reading this manual.

### **Warning**

- Do not perform any repair or work on **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** **with** the mast or forks are in the raised position.
- All personnel must stand clear of the machine when the mast and forks are in motion.
- Do not put hands or feet under mast or forks when in motion.
- Do not stand, sit or climb PSEWP when in operation.
- Do not use on soft, uneven or unstable surfaces.
- Do not exceed load capacity.

## Installation

### **A. Inspection**

Upon receipt of the **PSEWP**, inspect the equipment completely; to determine if there is any shipment damage and the **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** is complete. Do not use the **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** if there is any damage. With the **PSEWP POWERED STRADDLE ERGO WORK POSITIONER SERIES** in the **Down** position, check the following.

- (1) Signs of damage especially to the electrical cables, and hydraulic hoses.
- (2) Check connections for tightness. Is there hydraulic liquid visible?
- (3) Inspect for any bent or damaged metal parts.

## ***B. Installing***

- a) Your PPSEWP should be ready to roll when it arrives at your factory or warehouse door please reference note above before operating.
- b) Remove the handle shaft from the rest position; ensure that the handle reaches the full range up & down.
- c) Check to ensure there are no packing remnants left on moving parts.

## ***C. Testing The Lift Without Load:***

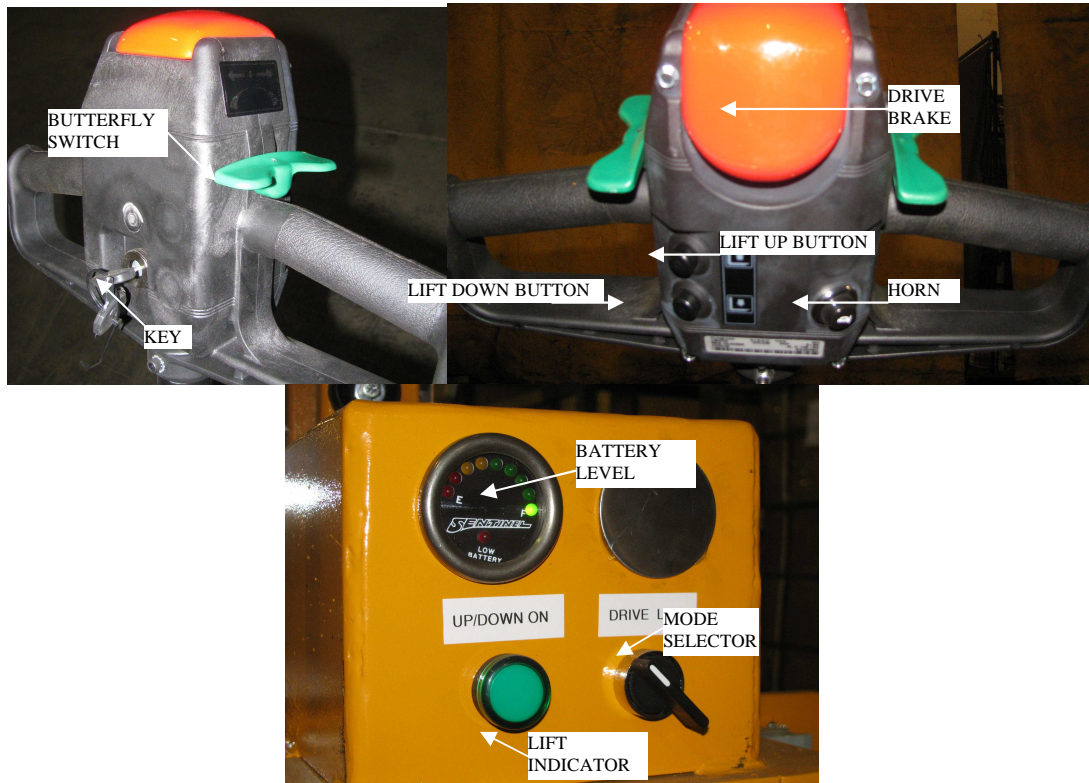
- a) Before testing the PSEWP, clear the area of any loose material or debris. Ensure there are no obstructions. On the control head there are two butterfly switches which control either the forward/reverse drive or the lift/lower of the unit, depending on which mode is selected. When drive mode is selected by depressing these switches, you can move the unit, and the further down the switch is depressed will determine the rate of speed at which you travel forward and reverse. **(Please consult our factory if you have any questions regarding this item.)**
- b) To operate the up /down commands turn the mode selector to lift. Depress the upper butterfly to raise the unit. To lower the unit depresses the lower butterfly switch. The unit will lower at constant speed regardless of how far the butterfly switch is pressed.

## **STOP**

**If the PSEWP forks do not rise, or there is any operational problem, stop operating the lift immediately. Before continuing, refer to the trouble shooting section of this manual and correct the problem.**

**After raising the PSEWP completely, lower the mast. It should move at a slow consistent pace and travel smoothly. If this procedure has been proven successful run the mast to different heights to give you or the operator a good perspective on how the unit operates at various levels.**

## OPERATION



These units have 2 modes: LIFT and DRIVE. The BUTTERFLY SWITCH controls either the lift or driving functions depending on which mode is selected. The key must be turned to off while switching between operating modes.

### DRIVE FUNCTION:

- (1) Ensure KEY is in "OFF" position
- (2) Turn MODE SELECTOR to "DRIVE"
- (3) Turn key to "ON" position
- (4) LIFT INDICATOR is OFF when in "DRIVE" mode
- (5) Use BUTTERFLY SWITCH to control forward and reverse of the drive unit
- (6) There is a safety limit switch that only allows the unit to move when the handle is lowered by operator
- (7) The red DRIVE BRAKE is a safety measure to ensure the lift does not drive into the operator, but does not need to be used normally, as releasing the BUTTERFLY SWITCH engages the brake

### LIFT FUNCTION:

- (1) Ensure KEY is in "OFF" position
- (2) Turn MODE SELECTOR to "LIFT"
- (3) Turn key to "ON" position
- (4) LIFT INDICATOR light will turn ON when in "LIFT" mode
- (5) Use the butterfly switch to control the lifting/lowering of the unit
- (6) The LIFT UP BUTTON and LIFT DOWN BUTTON will not function, as the unit has been wired for proportional control
- (7) The lift will raise faster, the further down the upper butterfly switch is pressed
- (8) The lowering speed is constant, so once the lower butterfly switch is pressed, it will lower at constant speed.

**WARNING: Never stand, sit or climb onto the PSEWP to avoid any possible injury.  
If the unit fails to move or exhibits jerky or sudden speed shifts “ Halt its use immediately and have an experienced maintenance person service the unit.**

**Do not operate this unit until all repairs and diagnostics have been completed.**

## **MAINTENANCE**

Generally the Econo Lift PSEWP will require little or no maintenance and should remain trouble free for quite some time to come. However in the event you should experience mechanical failure please review the notes below for reference. Just a reminder a routine inspection and maintenance policy is always a good way to insure this lifting device will give you a trouble free lift for years to come.

### **A. Routine Inspection and Maintenance:**

Inspection should be performed on a daily basis for general visual inspection and weekly for complete check of the system.

- a) With The PSEWP in the fully raised position with hydraulics under pressure, check for leaks. Inspect all fittings; hoses and related components for tightness, if a leak does occur repair this immediately to avoid damage to the unit or persons operating the unit.
- b) Check hydraulic cylinders for leaks. If fluid is draining from the top port of the cylinder (i.e.) where the breather valve is positioned this will require seal replacement. Reference your Serial # for proper replacement part.
- c) Check front rollers and casters for signs of damage and replace immediately if they show signs of damage.
- d) Tighten all visible nuts and bolts if required.
- e) Ensure all pivot pins and cylinder pins are secure.
- f) Bearings on all ECONO Lift Products are sealed and should require little or no servicing.

### **Yearly Maintenance:**

Oil in the reservoir should be changed at least once a year, or sooner if the oil becomes dark or gritty.

Use Dextron III ATF or equivalent for replacement

## **TROUBLESHOOTING**

### **PSEWP Moving Slowly Or Not At All**

- a) Check for obstructions.
- b) Ensure the battery is properly charged
- c) Check The Cylinder For Leaks
- d) Check that the PSEWP is not overloaded
- e) Check The Push Button For Sticking Or Jamming
- f) Check 12v Relay Switch, Repair Or Replace
- g) Ensure Key Switch Is In The On Position

### **Forks Are Stuck In The Up Position**

- a) Flow control may be obstructed. Check and replace if necessary.
- b) Solenoid valve is not opening. Check that power is being supplied to valve, if it is, the solenoid or the valve may be sticking and need replacement.
- c)

### **Forks Raise And Lower Slowly**

- a) Check for leaking hoses and or fittings
- b) Down valve may be stuck open due to dirt. Remove and clean see spec sheet for location.

### **Forks Do Not Raise To Full Extension**

- a) Check oil level in the reservoir. Hydraulic oil should be topped off when the mast is in the down position. Oil is added through the filler cap see spec sheet for location
- b) Check cylinder stroke, it might be restricted by obstructions.

## **CHARGING THE BATTERY**

Your PSEWP is equipped with a deep cycle battery, which must be charged properly, and with great caution. The supplied charger is designed to work with the system. The battery level indicator will indicate full when batteries have reached capacity.

### **CAUTION:**

Do not overcharge your battery. Your PSEWP is equipped with a deep cycle battery, which should be 75% discharged before recharging.

When charging your battery, locate your unit in a dry, well-ventilated area. An extension cord should never be used in conjunction with the power cable provided unless absolutely necessary.

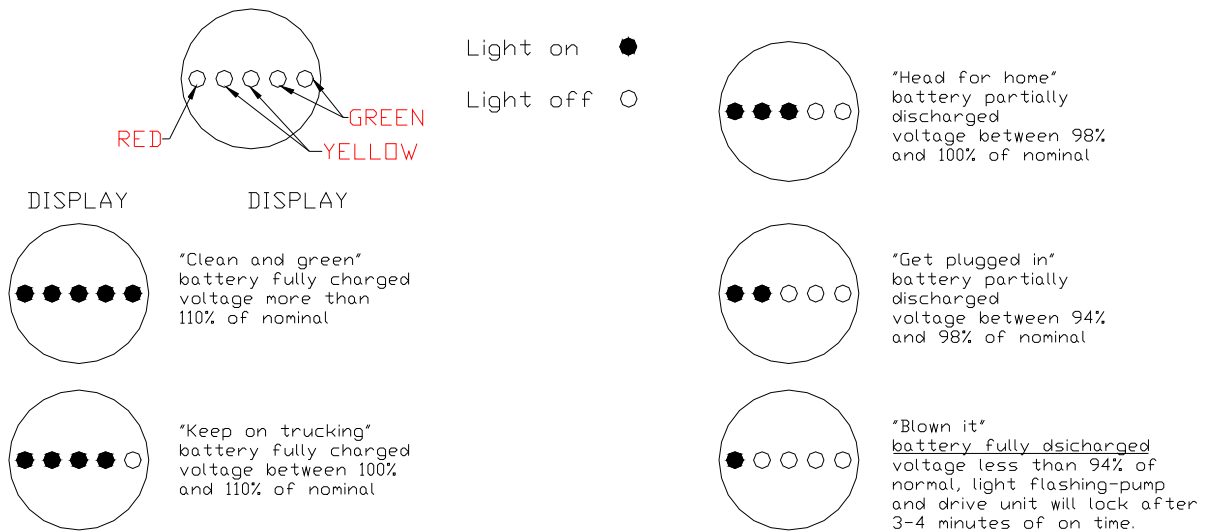
Never smoke or allow open flame in the vicinity of the battery.

Never operate the unit while charging the battery.

When the battery reaches full charge (maximum of 15 hrs) the green LED indicator should be present and the chargers output will be automatically shut down.

## Automatic Chargers Will Not Turn On Unless:

- The charger is plugged in.
- The charger is attached to the battery.
- The polarity is correct.
- The battery has between 3&4 volts output. A voltage reading of less than this will normally indicate a defective or dead power cell and attempting to charge it could result in physical danger to the operator or technician.



## **Warranty**

### **Econolift Warranty Policy**

**If any materials, parts or complete units prove defective, and providing claim is made within 80 days after shipment, we will replace or repair, at our option, the defective items.**

**The factory does not cover Service; service is the dealer's responsibility. On purchased parts, we pass along the manufactures warranty.**

**Individual part warranties are also passed along i.e.:**

- 1. Pump (power systems) one-year warranty.**
- 2. Battery**
  - First six months, straight exchange.**
  - Six months to twenty-four months, exchange on pro-rated schedule.**
- 3. Cylinder**
  - One year warranty**

**All warranties are subject to the individual manufactures exclusion**

## Appendix:

### **A. SPARE PARTS LIST, MECHANICAL:**

ITEM NO.	QTY.	DWG#	PART#	CUT_LENGTH	DESCRIPTION
1	2		ST-CS.75	3 1/2"	CHROME SHAFT 3/4"
2	2		PD-RC60	42"	ROLLER CHAIN #60
3	2		PD-NR50		NILOS RING 50 MM
4	1		PD-MR250FR		24v 800KW DRIVE MOTOR
5	2		PD-LN50		LOCK NUT 50MM
6	1		PD-FW50		FAN TAB WASHER
7	1		HP-HPI-D117		1.5KW-24V, #2 MINI D-TANK 1 SA
8	1		CYL-2528PL		HYD CYL 2.5 B X 28 S - PL
9	2		CW-WPH601		DIA. 6" PHENOLIC WHEEL
10	2		CW-SL04		DARCOR CASTER
11	2		BR-TR50X90X21.7		TAPER ROLLER BEARING

**B. SPARE PARTS LIST, ELECTRICAL:**

ITEM NO.	QTY.	PART#	DESCRIPTION
1	1	PD-ES-MC-1822	DRIVE CONTROLLER
2	1	PD-MC24DC	24V MOTOR CONTROLLER
3	1	EL-PLC016DC	24VDC ALLEN BRADLEY PLC
4	2	EL-SR-012	24V RELAY
5	1	EL-BKF-1S	2 POSITION SWITCH
6	1	EL-B22LED-G-G	GREEN LED LIGHT
7	1	PD-ES-MC-1822	CONTROLLER FOR MR250FR
8	1	PD-EL35	COMPETE HANDLE ASS'Y
9	1	PD-LD-P001	PLUNGER LIMIT SWITCH
10	2	EL-PROXI-12	PROX SWITCH, 18MM DIA
11	1	EL-CH2405	BATTERY CHARGER : 24V
12	1	EL-B31	BATTERY 12V

### C. FULL MAIN ASSEMBLY PARTS LIST

ITEM NO.	QTY.	DWG#	PART#	CUT_LENGTH	DESCRIPTION
1	1	C98-199B-4-0	SA-C98-199B-4-0	3 1/2" 42"	HANDLE SHAFT
2	1	C11-103-7-0A	SA-C11-103-7-0A		REAR FRAME COVER ASS'Y
3	2	C11-103-6-0	SA-C11-103-6-0		PROXY BRACKET
4	1	C11-103-1-0A	SA-C11-103-1-0A		BASE FRAME ASS'Y
5	1	C11-103-2-0	SA-C11-103-2-0		BACKPLATE ASS'Y
6	1	C08-221-6-0	SA-C08-221-6-0		CHAIN/HYD/ELEC ASS'Y
7	4	C08-221-5-0	SA-C08-221-5-0		BEARING/PLATE ASS'Y
8	1	C08-044-5-0	SA-C08-044-5-0		MAIN STEERING ASS'Y
9	1	C08-044-6-0	SP-C08-044-6-0		TOP STEERING COVER
10	2	C00-078-11-0	SP-C00-078-11-0		ADJUSTABLE CHAIN FOR BASE
11	2		SP-C00-078-2-2		UPPER CHAIN ANCHOR
12	1		PL-P.25X22.25X65.75L		LEXAN SHEET 22 1/4" X 65"
13	2		ST-CS.75		CHROME SHAFT 3/4"
14	2		PD-RC60		ROLLER CHAIN #60
15	2		PD-NR50		NILOS RING 50 MM
16	1		PD-MR250FR		24v 800KW DRIVE MOTOR
17	2		PD-LN50		LOCK NUT 50MM
18	1		PD-FW50		FAN TAB WASHER
19	1		PD-ES-MC-1822		CONTROLLER FOR MR250FR
20	1		PD-EL35		COMPETE HANDLE ASS'Y
21	1		HP-HPI-D117		1.5KW-24V, #2 MINI D-TANK 1 SA
22	2		EL-PROXI-12		PROX SWITCH, 18MM DIA
23	1		EL-HO-1		HORN 24V
24	1		EL-CH2405		BATTERY CHARGER : 24V
25	2		EL-B31		BATTERY 12V
26	1		CYL-2528PL		HYD CYL 2.5 B X 28 S - PL
27	2		CW-WPH601		DIA. 6" PHENOLIC WHEEL
28	2		CW-SL04		DARCOR CASTER
29	2		BR-TR50X90X21.7		TAPER ROLLER BEARING