

# Assembly and Installation Manual Model 850-052 PWC LIFT

MCD p/n 1130-01





## A. Parts Description

1. Check the following parts to ensure you have all the items necessary to assemble your new Metal Craft PWC LIFT:

Qty Needed	Part No.	Description	Weight
1	1135-01	PWC Lift Parts Box, Sealed (850-052).	35 lbs.
1	3760-03	26" Winch Wheel, Black, Boxed	10 lbs.
1	1140-01	Lift Side / Post Assembly, Left (850-052).	16 lbs.
1	1145-01	Lift Side / Post Assembly, Right (850-052).	16 lbs.
1	1150-01	Frame Assembly, Base, Front (850-052).	6 lbs.
1	1155-01	Frame Assembly, Base, Rear (850-052).	7 lbs.
1	1160-01	Cantilever Post Frame, 30"H, Front (850-052).	10.5 lbs.
1	1165-01	Cantilever Post Frame, 30"H, Rear (850-052).	10.5 lbs.
1	1170-01	Cradle Assembly Top (850-052).	20 lbs.
1 pr.	1175-01	6'L Black Carpeted 2"x4" Bunks (850-052).	14 lbs.
<i>Total Weight</i>			145 lbs.

The "Front" of the LIFT is determined by the two high posts. "Left" and "Right" are determined as you drive onto the lift from the "Rear" of the lift forward to the "Front."

2. Check the Parts Box and identify the following items:

Qty Needed	Part No.	Description
4	1100-01	6"W x 10"L Foot Pads.
4	1105-01	1-3/4" x 1/8" x 24"L Foot Pad Legs.
1	3755-03	DLB800A Dutton-Lainson Winch Assembly 1 - #3755-01 DLB800A Dutton-Lainson Winch w/o Handle, w/Manual 1 - #3757-01 Winch Installation Hardware, Bag, Dutton-Lainson
1	1110-01	Fasteners Kit, Sealed Bag (850-052).
1	1115-01	Decals, Sealed Bag (850-052). 1 - #3768-01 850 lb. Lifting Capacity 1 - #3769-01 Safety Guide 2 - #3769-03 Caution Pinch Point 1 - #3770-01 MCD Model 850-052
1	1006-01	PWC Med. Pulley Assembly, Sealed Bag 1 - #1005-01 PWC Med. Pulley, w/o Chain Link. 2 - #1005-02 PWC Med. Pulley, w/ Chain Link.
4	1010-01	2" x 3" Bunk Angles.
1	1125-01	3/16" x 13'L Galv. Cable w/ Thimble End (850-052).
1	1130-01	Assembly & Installation Manual (850-052).

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### 3. Check the Fasteners Kit (sealed plastic bag) and identify the following items:

Qty Needed	Part No.	Description	Used
12	3700-01	3/8-16" x 1" Hex Head C/S (ZY)	(8) Front; (4) Rear Frame
8	3700-02	3/8-16" x 1 1/4" Hex Head Lag Screw Bolt ZY	(2) Bunk Bracket x 4
2	3700-06	3/8-16" x 3" Hex Head C/S ZY	(2) Winch
30	3700-11	3/8-16" Nylon Insert Locknut ZY	(16) U-Bolts; (12) Frame; (2) Winch
18	3700-15	3/8" USS Flat washer ZY	2) Winch; (16) U-Bolts
4	3706-01	1/2-13" x 3" Hex Head C/S ZY	(4) Foot Pad
8	3706-05	1/2-13" x 5" Hex Head C/S ZY	(8) Cantilever Leg Bushings
12	3706-08	1/2-13" Nylon Insert Locknut ZY	(8) Cantilever Leg Bushings; (4) Foot Pads
4	3706-13	1/2-13" x 1 3/4" Hex Head C/S Stainless (SS)	(4) Adjustable Leg Stop
4	3706-12	1/2-13" Square Nut (3/4"x3/4") SS	(4) Adjustable Leg Stop
4	3709-01	Square U-Bolt, 3/8-16"x2-3/4"Lx2-1/4"IDx1"T ZY	(4) Bunks
2	3709-08	Round U-Bolt, 3/8-16"x4"L x1-3/4"IDx2"T ZY	(2) Pulley Attachment, Post
2	3709-02	Round U-Bolt, 3/8-16"x3-1/4"Lx1-3/4"IDx1-1/2"T ZY	(2) Pulley Attachment, Leg
8	3817-01	Cap Plug, Black, 2" Sq. (SQR 2-14-20)	(2) Posts; (4) Cradle; (2) Frame Base Front
2	3817-02	Cap Plug, Black, 1-3/4" Sq. (SQR 1-3/4-14-20)	(2) Rear Legs
2	3817-03	Cap, Push On, Black, 1-3/4" x 3"	(2) Frame Base Rear
1	1000-01	Spinner Knob Assm. (preassembled in sealed bag)	Winch Wheel Knob
		1 - #3765-01 Spinner Knob	
		1 - #3700-06 3/8-16" x 3" HHCS ZY	
		1 - #3700-11 3/8-16" Nylon Insert Locknut ZY	
		1 - #3700-12 3/8-16" Finished Hex Nut ZY	
		3 - #3700-15 3/8" USS Flat washer ZY	

If any problems are found, do not proceed.

**Call your Metal Craft Dealer.**

Or, reach Metal Craft at **800-989-3625** or at **www.metalcraftlifts.com**

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## B. Assembly Instructions

### Step #1 -

Bolt the following **Frame** items together:

- |          |                |   |
|----------|----------------|---|
| <b>1</b> | <b>1140-01</b> | Lift Side / Post Assembly, Left (850-052).  |
| <b>1</b> | <b>1145-01</b> | Lift Side / Post Assembly, Right (850-052). |
| <b>1</b> | <b>1150-01</b> | Frame Assembly, Base, Front (850-052).      |

With these fasteners:

- |          |                |                                 |
|----------|----------------|---------------------------------|
| <b>8</b> | <b>3700-01</b> | 3/8-16" x 1" Hex Head C/S (ZY)  |
| <b>8</b> | <b>3700-11</b> | 3/8-16" Nylon Insert Locknut ZY |

*Do not tighten Bolts -- leave loose until Lift is fully assembled.*

### Step #2 -

Bolt the following **Frame** item into place at the rear of the Lift:

- |          |                |                                       |
|----------|----------------|---------------------------------------|
| <b>1</b> | <b>1155-01</b> | Frame Assembly, Base, Rear (850-052). |
|----------|----------------|---------------------------------------|

Position Frame Assembly with drain holes down. Use these fasteners:

- |          |                |                                 |
|----------|----------------|---------------------------------|
| <b>4</b> | <b>3700-01</b> | 3/8-16" x 1" Hex Head C/S (ZY)  |
| <b>4</b> | <b>3700-11</b> | 3/8-16" Nylon Insert Locknut ZY |

*Do not tighten Bolts -- leave loose until Lift is fully assembled.*

### Step #3 -

Assemble and Bolt the following **Foot Pad/Leg** items together:

- |          |                |                                     |
|----------|----------------|-------------------------------------|
| <b>4</b> | <b>1100-01</b> | 6"W x 10"L Foot Pads.               |
| <b>4</b> | <b>1105-01</b> | 1-3/4" x 1/8" x 24"L Foot Pad Legs. |

With these fasteners -- tighten bolts on the Foot Pads:

- |          |                |                                 |
|----------|----------------|---------------------------------|
| <b>4</b> | <b>3706-01</b> | 1/2-13" x 3" Hex Head C/S ZY    |
| <b>4</b> | <b>3706-08</b> | 1/2-13" Nylon Insert Locknut ZY |

### Step #4 -

Install the (4) **Foot Pad/Legs** onto the Lift. The Front two slide into the upright post from the bottom. The rear two Foot Pad/Legs slide into the open rectangular posts.

Lock the Foot Pad/Legs in place with these fasteners:

- |          |                |  |
|----------|----------------|--|
| <b>4</b> | <b>3706-13</b> | 1/2-13" x 1 3/4" Hex Head C/S Stainless (SS) |
| <b>4</b> | <b>3706-12</b> | 1/2-13" Square Nut (3/4"x3/4") SS            |

Insert the Square Nut into the Adjustable Leg Stop welded in place on the Lift Frame. Insert the Bolt and screw it through the Bolt and into the Foot Pad/Leg. Tighten Bolt to secure Leg in place.

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## Step #5 -

Install the bottom of the **Front Cantilever Post Frame**:

**1**      **1160-01**    Cantilever Post Frame, 30"H, Front (850-052).

Position with drilled U-Bolt holes at top. Use these fasteners:

**2**      **3706-05**    1/2-13" x 5" Hex Head C/S ZY

**2**      **3706-08**    1/2-13" Nylon Insert Locknut ZY

*Do not tighten Bolts -- leave loose until Lift is fully assembled.*

## Step #6 -

Install the bottom of the **Rear Cantilever Post Frame**:

**1**      **1165-01**    Cantilever Post Frame, 30"H, Rear (850-052).

Use these fasteners:

**2**      **3706-05**    1/2-13" x 5" Hex Head C/S ZY

**2**      **3706-08**    1/2-13" Nylon Insert Locknut ZY

*Do not tighten Bolts -- leave loose until Lift is fully assembled.*

## Step #7 -

Install the **Cantilever Assembly** on top of the two Cantilever Posts installed in Steps #5 and #6 (note: drain holes are on bottom):

**1**      **1170-01**    Cradle Assembly Top (850-052).

Position Cantilever Assembly with drain holes down. Use these fasteners:

**4**      **3706-05**    1/2-13" x 5" Hex Head C/S ZY

**4**      **3706-08**    1/2-13" Nylon Insert Locknut ZY

*Do not tighten Bolts -- leave loose until Lift is fully assembled.*

## Step #8 -

**Tighten Bolts** in the following order:

- Bottom Frame.
- Legs.
- Lower Cantilever Post Hinges (snug only - do not over tighten or hinges will bind).
- Upper Cantilever Post Hinges (snug only - do not over tighten or hinges will bind).

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## Step #9 -

Install the following two **Pulleys** with Chain Link on the **short U-Bolts**:

- 2**     **1005-02**    PWC Med. Pulley, with Chain Link.
- 4**     **3700-11**    3/8-16" Nylon Insert Locknut ZY
- 4**     **3700-15**    3/8" USS Flat washer ZY
- 2**     **3709-02**    Round U-Bolt, 3/8-16"x3-1/4"Lx1-3/4"IDx1-1/2"T ZY

onto the front face of the **Front Cantilever Post Frame**.

- 1**     **1160-01**    Cantilever Post Frame, 30"H, Front (850-052).

Install the U-Bolts with the round part facing forward. Use the predrilled holes to locate the U-Bolts. Hang the Pulleys on the U-Bolts by the attached Chain Link.

## Step #10 -

Install the **Galv. Cable Thimble End** on a **long U-Bolt**:

- 1**     **1125-01**    3/16" x 13'L Galv. Cable w/ Thimble End (850-052).
- 2**     **3700-11**    3/8-16" Nylon Insert Locknut ZY
- 2**     **3700-15**    3/8" USS Flat washer ZY
- 1**     **3709-08**    Round U-Bolt, 3/8-16"x4"L x1-3/4"IDx2"T ZY

*or - substitute the following part:*

- 1**     **3709-03**    Round U-Bolt, 3/8-16"x5" x1-3/4"IDx2"T ZY

Install onto the rear face of the **Right Post Assembly**

- 1**     **1145-01**    Lift Side / Post Assembly, Right (850-052).

Install the U-Bolt with the round part facing rearwards. Use the predrilled holes to locate the U-Bolt to the right front upright Frame Post Assembly.

## Step #11 -

Install the following **Pulley** without Chain Link on a **long U-Bolt**:

- 1**     **1005-01**    PWC Med. Pulley, without Chain Link.
- 2**     **3700-11**    3/8-16" Nylon Insert Locknut ZY
- 2**     **3700-15**    3/8" USS Flat washer ZY
- 1**     **3709-08**    Round U-Bolt, 3/8-16"x4"L x1-3/4"IDx2"T ZY

*or - substitute the following part:*

- 1**     **3709-03**    Round U-Bolt, 3/8-16"x5" x1-3/4"IDx2"T ZY

onto the rear face of the **Left Post Assembly**

- 1**     **1140-01**    Lift Side / Post Assembly, Left (850-052).

Install the U-Bolt with the round part facing rearwards. Use the predrilled holes to locate the U-Bolt to the left front upright Frame Post Assembly.

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## Step #12 -

Install the **Winch**:

- |          |                |  |
|----------|----------------|--|
| <b>1</b> | <b>3755-01</b> | DLB800A Dutton-Lainson Winch w/o Handle, w/Manual. |
| <b>2</b> | <b>3700-06</b> | 3/8-16" x 3" Hex Head C/S ZY                       |
| <b>2</b> | <b>3700-11</b> | 3/8-16" Nylon Insert Locknut ZY                    |
| <b>2</b> | <b>3700-15</b> | 3/8" USS Flat washer ZY                            |

onto the rear face of the **Left Post Assembly, at the top**, facing the rear of the lift.

- |          |                |  |
|----------|----------------|--|
| <b>1</b> | <b>1140-01</b> | Lift Side / Post Assembly, Left (850-052). |
|----------|----------------|--|

Note: Optionally, the Winch can be installed on the Right Post. Change Steps #10 and #11 to reverse locations of Galvanized Cable (to Left Post) and Pulley (to Right Post).

## Step #13 -

Install the **Black Winch Wheel**:

- |          |                |  |
|----------|----------------|--|
| <b>1</b> | <b>3760-03</b> | 26" Winch Wheel, Black, Boxed                    |
| <b>1</b> | <b>3757-01</b> | Winch Installation Hardware, Bag, Dutton-Lainson |

Follow instructions provided with Winch

## Step #14 -

Install the **Spinner Knob** on the Winch Wheel:

- |          |                |   |
|----------|----------------|---|
| <b>1</b> | <b>1000-01</b> | Spinner Knob Assm. (preassembled in sealed bag) |
|          |                | 1 - #3765-01 Spinner Knob                       |
|          |                | 1 - #3700-06 3/8-16" x 3" HHCS ZY               |
|          |                | 1 - #3700-11 3/8-16" Nylon Insert Locknut ZY    |
|          |                | 1 - #3700-12 3/8-16" Finished Hex Nut ZY        |
|          |                | 3 - #3700-15 3/8" USS Flat washer ZY            |

Place a washer on each side of hole. Tighten Locknut.

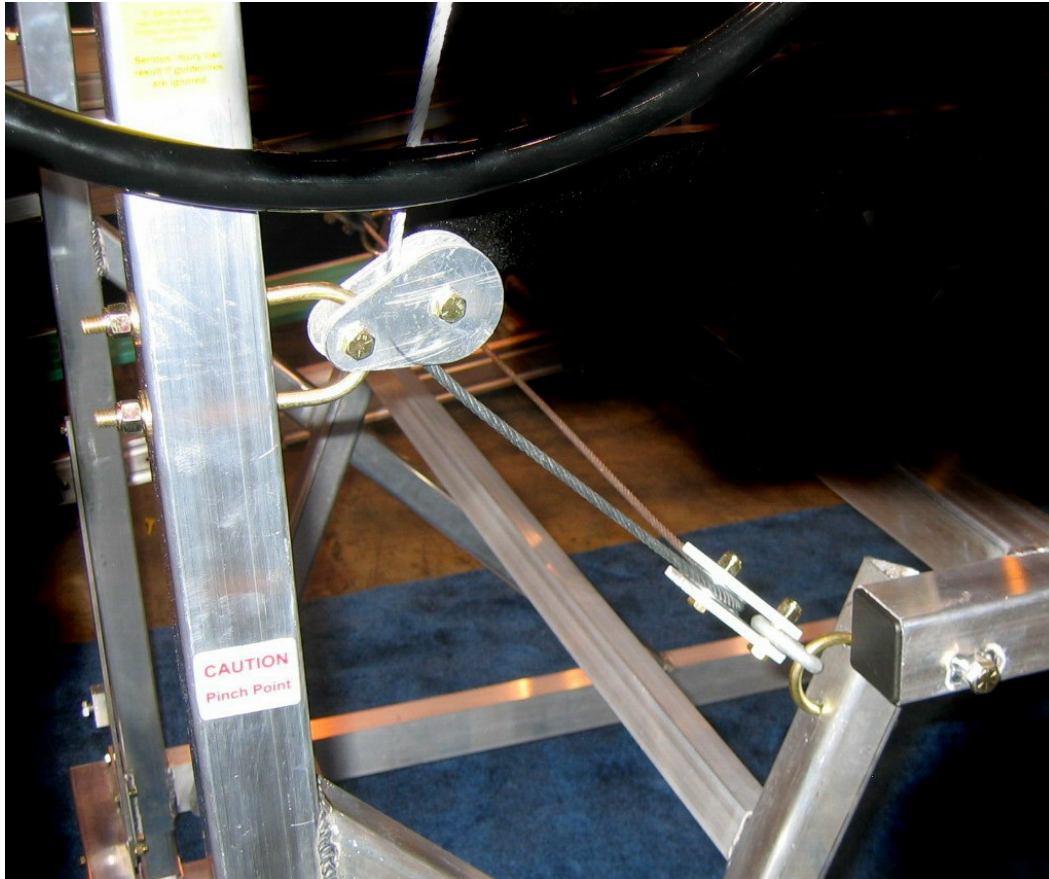
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## Step #15 -

Install the **Galvanized Cable** through the three Pulleys. Attach Cable to **Winch Drum** using the following parts:

- 1      **3757-01**    Winch Installation Hardware, Bag, Dutton-Lainson

Follow instructions provided with Winch.



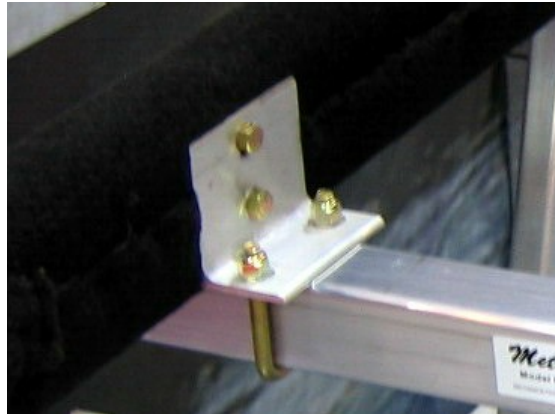
## Step #16 -

Install **Bunks** using the following parts:

- |       |                |  |
|-------|----------------|--|
| 4     | <b>1010-01</b> | 2" x 3" Bunk Angles.                           |
| 1 pr. | <b>1175-01</b> | 6'L Black Carpeted 2"x4" Bunks (850-052).      |
| 8     | <b>3700-02</b> | 3/8-16" x 1 1/4" Hex Head Lag Screw Bolt ZY    |
| 8     | <b>3700-11</b> | 3/8-16" Nylon Insert Locknut ZY                |
| 8     | <b>3700-15</b> | 3/8" USS Flat washer ZY                        |
| 4     | <b>3709-01</b> | Square U-Bolt, 3/8-16"x2-3/4"Lx2-1/4"IDx1"T ZY |

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Install U-Bolts facing up -- insert through the Bunk Angles. Place Carpeted Bunks onto the Cradle Frame, align, and then secure using Lag Screws into the wood Bunk. Bunks Angles are located on the inside of the Carpeted Bunks.



## Step #17 -

Install Black Plastic Plugs in (2) Posts, (4) Cradle, (2) Frame Base Front:

**8**      **3817-01**    Cap Plug, Black, 2" Sq. (SQR 2-14-20)

Install Black Plastic Plugs in (2) Frame Base Rear:

**2**      **3817-03**    Cap, Push On, Black, 1-3/4" x 3"

Caps are provided for the (2) Rear Legs. Cut inside corners of the caps to fit the rounded shape of the leg extrusion. Installation is optional:

**2**      **3817-02**    Cap Plug, Black, 1-3/4" Sq. (SQR 1-3/4-14-20)



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## **Step #18 -**

Install the **Labels**.

- 1**     **1115-01**   Decals, Sealed Bag (850-052).
  - 1 - #3768-01 850 lb. Lifting Capacity
  - 1 - #3769-01 Safety Guide
  - 2 - #3769-03 Caution Pinch Point
  - 1 - #3770-01 MCD Model 850-052

Place the “*Lifting Capacity*”, “*Safety Guide*” and “*MCD Model*” labels on post close to Winch. Place the “*Caution Pinch Point*” labels on left and right upright Posts where Cradle meets the Post in the upright raised position.

## **Step #19 -**

Test **operation** of LIFT. Make adjustments as necessary until Cradle raises and lowers easily.

Adjust Bunks side-to-side to fit PWC.

Adjust front Legs to desired height then adjust rear Legs to level lift.

## **End of Assembly and Installation**

