

## MODEL SWH10 1,000 LB CAPACITY SWIVEL HOIST

## PARTS BREAKDOWN AND OPERATING MANUAL

© Copyright 2007, Arcan Professional Tools Rev: 05/15/07



This operating manual contains important safety information. Read carefully and understand all information before operating tool. Save this manual for future use.

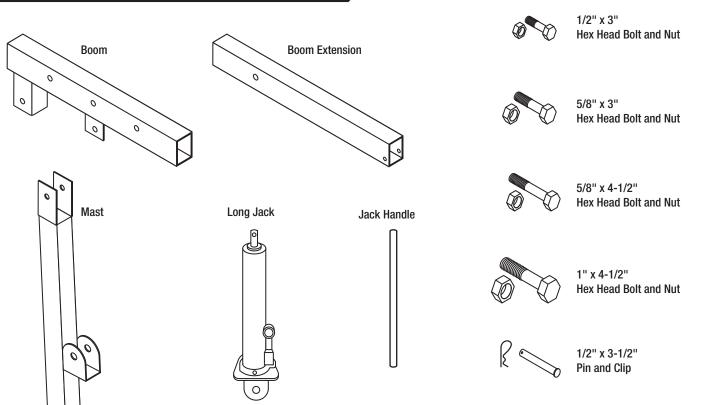
PO Box 58

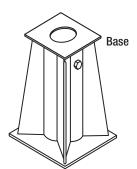
Travelers Rest, SC 29690

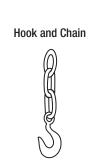
Customer Service: (800) 879-7316 Mon-Fri 8:30AM - 5:30PM

Fax: (864) 834-0073

## **PARTS LIST**







**Plastic Ring** 





## SAFETY INFORMATION

**A** WARNING

This symbol alerts you to the possibility of serious injury or death if instructions are not followed.



This symbol alerts you to the possibility of damage to or destruction of equipment if instructions are not followed.

**A** WARNING

This operating manual contains important details concerning the safe operation of this tool. The user must read and understand these details

before any use of the tool. This manual must be retained for future reference. Failure to heed these warnings may result in loss of load, damage to the hoist and/or failure resulting in property damage, personal or fatal injury.

## **A** WARNING

- Read, study, and understand all instruction manuals packed with this hoist before operating.
- Always wear appropriate clothing, including safety goggles, when assembling or operating this hoist.
- Keep all body parts, clothing, and equipment free from the moving parts of this hoist to reduce the risk of injury.
- The hoist should be visually inspected before each use to check for leaking hydraulic fluid and cracked, damaged, loose, or missing parts.
- Ensure that all pins and components are locked securely into desired settings before operating the hoist.
- This hoist is designed for use only on hard, level surfaces that are capable of sustaining the load. Use on other than hard, level surfaces can result in hoist instability and possible loss of load.
- When removing engines from vehicles, ensure that the hydraulic unit does not contact the vehicle in any way. Failure to keep the hoist clear from obstructions could result in a dropped engine.
- Never overload the hoist. Overloading can cause damage to or failure of the hoist.
- Use only slings, chains, hooks, and connectors with weight capacities greater than the weight of the load being lifted.
- Lower boom and load to the lowest possible position and ensure that the load is stable and balanced before transporting.
- Assure that the load is not allowed to drop suddenly or swing during transport.
- Lower the boom completely before adding oil hydraulic oil to the pump reservoir.
- Do not alter the hoist in any way. Do not substitute bolts, pins, or any other component of the hoist. Use only genuine factory replacement parts.

### OWNER/USER RESPONSIBILITY

The owner and/or user must have an understanding of the manufacturer's operating instructions and warnings before using this hoist. Personnel involved in the use and operation of equipment must be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components.

Warning information should be emphasized and understood. If the operator is not fluent in English, the manufacturer's instructions and warnings must be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

#### INSPECTION

The hoist should be visually inspected before each use to check for leaking hydraulic fluid and cracked, damaged, loose, or missing parts. Each hoist must be inspected by a manufacturer's repair facility immediately if it is subjected to an abnormal load or shock. Any hoist which appears to be damaged in any way, is found to be badly worn, or operates abnormally must be removed from service until necessary repairs are made by a manufacturer's authorized repair facility. An annual inspection of the hoist should be made by a manufacturer's authorized repair facility and that any defective parts, decals, or warning labels be replaced with manufacturer's specified parts. A list of authorized repair facilities is available from the manufacturer.

#### **SAFETY INSTRUCTIONS**

- CHECK YOUR LOCAL, STATE AND FEDERAL REGULATIONS REGARDING THE SAFE USE OF THIS EQUIPMENT.
- Your safety is a top priority. Please handle equipment with care.
- This hoist will exert a lifting force on anything connected to its boom.
   Ensure that all components that are not to be lifted, such as exhaust and cooling components, are detached from the engine before lifting.
- Clear the area of bystanders, especially small children, before using.
- Keep the area above and around the hoist free of obstacles to reduce the risk of damage to property, failure of equipment, and fatal injury.

NOTES		
	 _	 

We want to know if you have any problems with our products. If you are missing any parts or find any damage, call Arcan directly, and we will remedy the situation. Please do not call the store where you purchased this product.

Customer Service: (800) 879-7316 Mon-Fri 8:30AM - 5:30PM

arcanusa.com

## **ASSEMBLY INSTRUCTIONS**

## **Step 1: Assembly preparation.**

Before assembly, attach base to a permanent surface capable of sustaining the maximum load of 1,000 lbs. Parts for this application are not included with the purchased product.

NOTE: Base comes pre-attached to mast. Remove mast before attaching base to a permanent surface. Be sure to loosen the pre-attached bolt in the base to slide the mast out freely.



Mount base to a permanent surface capable of sustaining the maximum load.

NOTE: If vehicle mounted, user must consult with vehicle manufacturer to ensure vehicle is capable of supporting the hoist and the hoist loaded at a maximum of 1,000 lbs. Modifications to the vehicle may be required for proper installation and safe vehicle operation.

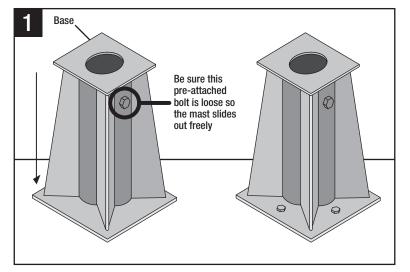
## Step 2: Connecting the mast to the base.

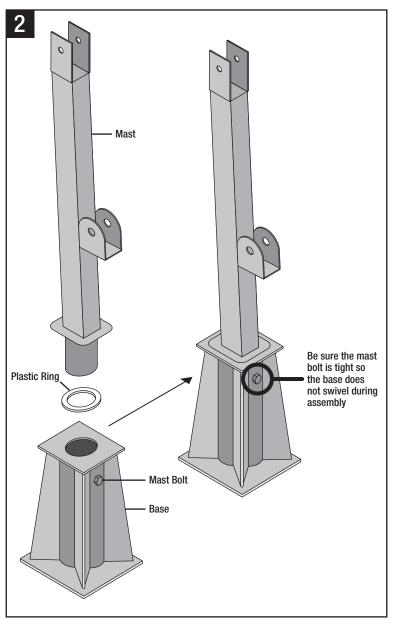
Position the plastic ring so it fits around hole in base. Using two people, fit the mast through the plastic ring and into the hole in the base.

Tighten mast bolt after assembly to hold mast and boom in place.



Mast bolt must be tightened to prevent mast and boom from swiveling.





## **ASSEMBLY INSTRUCTIONS CONTINUED**



#### Step 3: Connecting the boom to the mast.

Using two people, position the boom between the top plates on the mast. Align the holes in the plates with the holes in the connecting part of the boom. Use the 1" x 4-1/2" hex head bolt and nut to secure the boom to the mast and tighten.

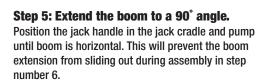


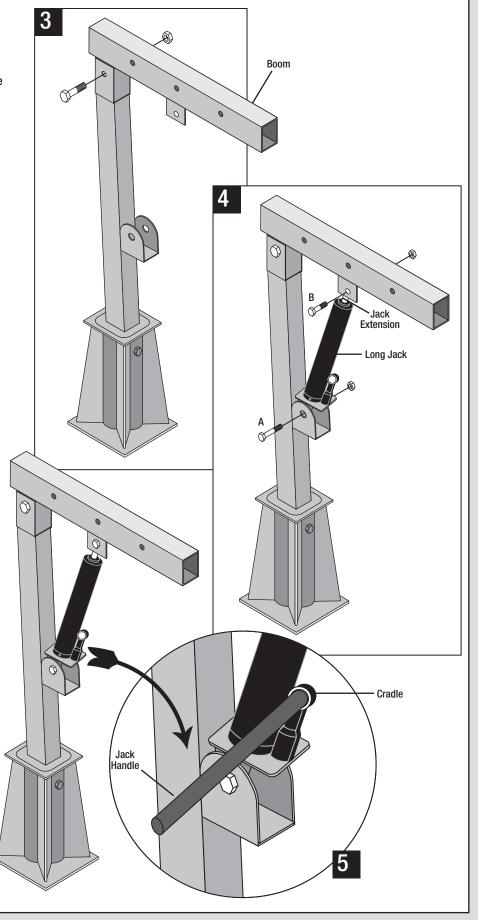
# Step 4: Connecting the long jack to the mast and the boom.

- A. Using two people, lift the long jack into place and align holes in bottom jack plates with holes in mast. Attach to mast using the 5/8" x 4-1/2" hex head bolt and nut.
  - B. Align the top hole in the jack extension with the holes in the BOOM.

NOTE: Use the 5/8" x 3" hex head bolt, if necessary, to align the hole in the top of the jack extension. It may be necessary to turn the hole outward to align it properly with the boom plates.

2. Attach to boom using the 5/8" x 3" hex head bolt and nut.





## **ASSEMBLY INSTRUCTIONS CONTINUED**

## Step 6: Inserting boom extension into the boom.

Align the boom extension with the boom and slide into place.

## **Step 7: Securing boom extension.**

Make sure all holes in boom and boom extension are aligned. Use the 1/2" x 3-1/2" pin and clip to secure the boom extension to the boom at the desired lift rating.

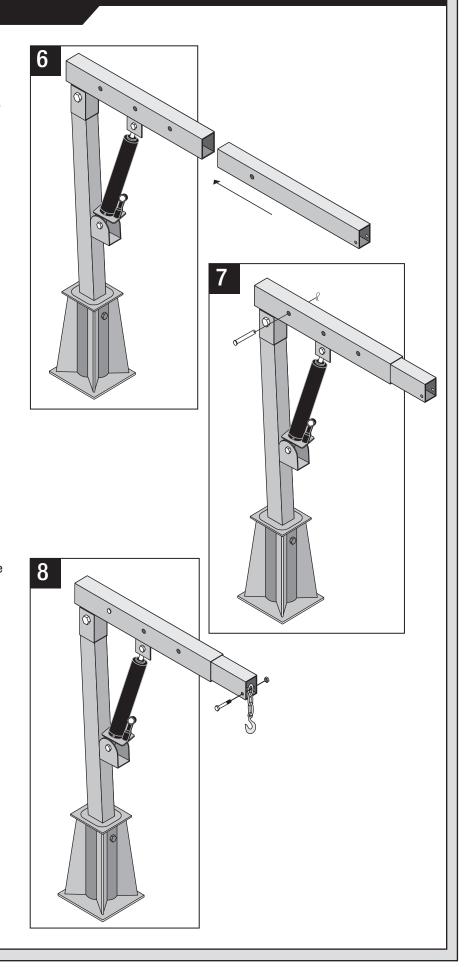


Make sure pin is completely through boom and boom extension.

# Step 8: Attaching the hook and chain to the boom extension.

Using the 1/2" x 3" hex head bolt, go through one hole on the end of the boom extension, through a link of chain, and out through the opposite boom extension hole. Secure with nut.

Assembly is complete.





## **OPERATING INSTRUCTIONS**

### **BEFORE OPERATION**



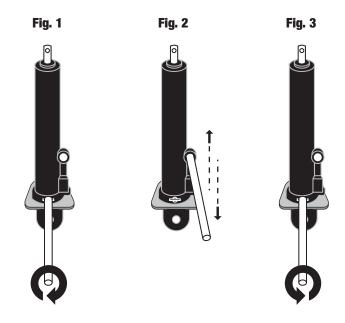
Before operation, check to ensure all parts are assembled correctly and all fasteners are tight.

#### LONG JACK OPERATION (see illustration below)

- 1. Close release valve by rotating clockwise (fig. 1).
- 2. Insert handle into cradle (fig. 2).
- 3. Pump to raise the load (fig. 2).
- Remove handle from cradle and turn release valve counter-clockwise to open. (fig. 3).



Turn release valve SLOWLY to prevent load from dropping suddenly.



#### **OPERATION INSTRUCTIONS**

 Position the hoist so that the engine sling, leveler or load can by lifted by the boom hook. Attach the hook securely to the sling or load to be lifted.



Ensure that any device or devices used to attach the load to the hoist are capable of sustaining the load. The load must be secured so that it can be lifted in a safe and controlled manner. Clear the area of any bystanders and check for obstructions and hazards before operating hoist. Failure to follow these warnings could result in sudden loss of load, property damage and fatal injury.

- Raise the boom by first turning the release valve on the long jack clockwise until it is closed.
- Insert the pump handled into the pump cradle and operate the pump by moving handle up and down until load is at the desired height.
- To lower the load, remove handle from the pump cradle and slowly turn the release valve on the long jack counter-clockwise.

The release valve must be turned slowly so the load can be lowered in a safe



and controlled manner. Failure to follow these warnings could result in sudden loss of load, property damage and fatal injury.

#### **MAINTENANCE**

- Inspect the hoist before each use. Check for cracks, loose, missing, or damaged parts, and for hydraulic leaks. If the hoist is found to be badly worn or damaged in any way, it MUST BE REMOVED FROM SERVICE IMMEDIATELY UNTIL IT IS REPAIRED BY A FACTORY AUTHORIZED REPAIR FACILITY. Repair of this hoist requires specialized knowledge and facilities and must not be attempted by unauthorized agents. Use only factory authorized parts, labels, and decals on this hoist.
- Check to ensure the hoist has not been modified from its original condition. Never modify this hoist in any way. Never use unapproved accessories. Modifications and inferior accessories can lead to failure of the hoist resulting in loss of load, property damage, or fatal injury.
- Keep all surfaces of the hoist clean and free of contaminants. Maintain all labels, decals, and warnings.
- Periodically grease pivot points:
  - Boom to Upright Mast joint
  - Ram Mount to Boom
- Periodically check oil level in Hydraulic Unit.

#### TO CHECK OIL LEVEL:

- 1. Lower the Boom until the Ram is fully retracted.
- 2. Remove the Oil Fill Plug.
- With Ram in horizontal position, oil should be even with bottom of Fill Plug hole. If oil is low, fill with new, clean hydraulic jack oil.



Use only products labeled "Hydraulic Jack Oil" with this hydraulic unit. Other fluids will damage the hydraulic system, resulting in failure of the hoist.

- 4. Replace filler plug.
- 5. Close Release Valve and check for proper Hydraulic Unit operation.

#### **STORAGE**

- 1. Retract boom and secure with locking pin.
- Slowly turn release valve on long jack counter clockwise and allow boom to reach its lowest position. Turn release valve on long jack clockwise to close and store in closed position.
- 3. Ensure that mast bolt in base of the hoist is tightened to prevent boom and mast from moving un-expectedly.
- 4. Ensure that boom is stored in a manner which will prevent it from coming into contact with any obstructions.

#### **TROUBLESHOOTING**

HYDRAULIC SYSTEM AIR PURGE - Air may occasionally enter the hoist's hydraulic system, hindering operation of the ram. To purge air:

- 1. Turn Release Valve counterclockwise to open.
- 2. Slowly pump Handle eight full strokes.
- 3. Close Release Valve.
- Pump Handle until Ram is fully extended and continue to pump Handle to purge air from underneath the Ram.
- 5. Lower Boom.
- 6. Repeat as often as necessary.

#### **OTHER SYMPTOMS:**

CAUSE	REMEDY
Low Oil Level	see Check Oil Level
Release Valve Open	Close Release Valve
Pump Valves not sealing	Contact Arcan
Air trapped in system	see Air Purge
Ram binding	Contact Arcan
Release Valve broken	Contact Arcan
Parts worn/bent	Contact Arcan
Air trapped in system	See Air Purge
	Low Oil Level Release Valve Open Pump Valves not sealing Air trapped in system Ram binding Release Valve broken Parts worn/bent



0

## **SPECIFICATIONS AND PARTS LIST**

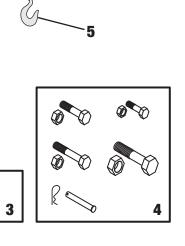
## **SPECIFICATIONS**

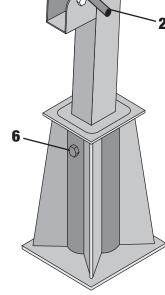
	POS. 1	POS. 2	POS. 3	
Max Lifting Height Base to Hook:	106"	95.5"	88"	
Min Lifting Height Base to Hook:	15"	21.5"	27.25"	
Boom Capacity:	250 lbs	500 lbs	1000 lbs	
Boom Ext (From End to Ram):	48"	38"	28"	

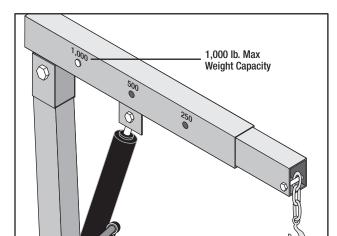
Base Dimensions:	10-1/4" x 10-1/4"
Boom Swivel:	360°
Power Unit:	8 Ton Heavy Duty Quick Lift
Shipping Weight:	135 lbs

#### **PARTS LIST**

ITEM	PART #	# REQ'D	DESCRIPTION
1	RS5040B	1	Long Jack (with handle)
2	RS5040BHDL	. 1	Jack Handle
3	SWH1001	1	Plastic Ring
4	SWH1002	1	Hardware Kit
			1/2" x 3" Hex Head Bolt and Nut
			5/8" x 3" Hex Head Bolt and Nut
			5/8" x 4-1/2" Hex Head Bolt and Nut
			1" x 4-1/2" Hex Head Bolt and Nut
			1/2" x 3-1/2" Pin and Clip
5	SWH1003	1	Hook and Chain
6		1	Mast Bolt







We want to know if you have any problems with our products. If you are missing any parts or find any damage, call Arcan directly, and we will remedy the situation. Please do not call the store where you purchased this product.

Customer Service: (800) 879-7316 Mon-Fri 8:30AM - 5:30PM

arcanusa.com

rev.051507