

PLEASE READ THE ENTIRE CONTENTS OF THIS MANUAL PRIOR TO INSTALLATION AND OPERATION. BY PROCEEDING YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH. REV D 10-20-16 P/N: 5900969

INSTALLATION AND OPERATION MANUAL

2-Ton Hydraulic Folding Shop Crane

Model: RSC-2TF



READ FIRST

all the dangers, warnings and cautions in this manual.

Keep this operation manual near the machine at all times. Make sure that <u>ALL USERS</u> read this manual.

SHIPPING DAMAGE CLAIMS

When this equipment is shipped, title passes to the purchaser upon receipt from the carrier. Consequently, claims for the material damaged in shipment must be made by the purchaser against the transportation company at the time shipment is received.

BE SAFE

Your new Shop Crane was designed and built with safety in mind. However, your overall safety can be increased by proper training and thoughtful operation on the part of the operator. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.



1645 Lemonwood Dr. Santa Paula, CA. 93060, USA Toll Free 1-800-253-2363 Tel: 1-805-933-9970 Fax: 1-805-933-9160 www.rangerproducts.com

RANGER RSC-2TF HYDRAULIC SHOP CRANE

This instruction manual has been prepared specifically for you. Your new Hydraulic Shop Crane is the product of over 40 years of continuing research, testing and development; it is the most technically advanced Hydraulic Shop Crane on the market today. The manner in which you care for and maintain your Hydraulic Shop Crane will have a direct effect on its overall performance and longevity.

READ THIS ENTIRE MANUAL BEFORE INSTALLATION & OPERATION BEGINS.

PRODUCT WARRANTY

Your new RSC-2TF 2-Ton Hydraulic Folding Shop Crane is covered under warranty for one year on equipment structure; one year on all operating components and tooling/accessories, to the original purchaser, to be free of defects in material and workmanship. The manufacturer shall repair or replace at their option for this period those parts returned to the factory freight prepaid which prove upon inspection to be defective. The manufacturer will pay labor costs for the first 12 months only on parts returned as previously described.

The warranty does not extend to:

- defects caused by ordinary wear, abuse, misuse, negligence, shipping damage, improper installation, voltage or lack of required maintenance.
- damages resulting from purchaser's neglect or failure to operate products in accordance with instructions provided in the owner's manual(s) and/or other accompanying instructions supplied.
- normal wear items or service normally required to maintain the product in a safe operating condition.
- any component damaged in shipment.
- other items not listed but may be considered general wear parts.
- damage caused by rain, excessive humidity, corrosive environments or other contaminants.

THESE WARRANTIES DO NOT EXTEND TO ANY COSMETIC DEFECT NOT INTERFERING WITH EQUIPMENT FUNCTIONALITY OR ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE, OR MALFUNCTION OF A BENDPAK, INC. / RANGER PRODUCT OR THE BREACH OR DELAY IN PERFORMANCE OF THE WARRANTY.

For more information about warranty, please visit:

www.rangerproducts.com/warranty

DEFINITIONS OF HAZARD LEVELS



Identify the hazard levels used in this manual with the following definitions and signal words:

▲ DANGER

Watch for this symbol: It Means: Immediate hazards which will result in severe personal injury or death.

Watch for this symbol: It Means: Hazards or unsafe practices which could result in severe personal injury or death.



Watch for this symbol: It Means: Hazards or unsafe practices which may result in minor personal injury or product or property damage.

Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.

Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

For additional copies or further information, contact:

BendPak Inc. / Ranger Products 1645 Lemonwood Dr., Santa Paula, CA. 93060 1-805-933-9970 www.bendpak.com www.rangerproducts.com

OPERATOR PROTECTIVE EQUIPMENT

Personal protective equipment helps keep equipment use safer. However, equipment does not take the place of safe operating practices. Always wear durable work clothing. Shop aprons or shop coats may also be worn, however loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect operators. Sturdy

leather work shoes with steel toes and oil resistant soles should be used by personnel to help prevent injury in typical shop activities. Eye protection is essential during installation



and operation activities. Safety glasses with side shields, goggles, or face shields are acceptable. Back belts provide support during lifting activities and are also helpful in providing operator protection. Consideration should also be given to the use of hearing protection if activity is performed in an enclosed area, or if noise levels are high.

OWNER'S RESPONSIBILITY

To maintain machine and user safety, the responsibility of the owner is to read and follow these instructions:

- Follow all installation instructions.
- Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes.
- Carefully check the unit for correct initial function.
- Read and follow the safety instructions. Keep them readily available for machine operators.
- Make certain all operators are properly trained, know how to safely and correctly operate the unit.
- Allow unit operation only with all parts in place and operating safely.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with authorized or approved replacement parts.
- Keep all instructions permanently with the unit and all decal's on the unit clean and visible.



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH IF NOT FOLLOWED COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS AND CAN CAUSE PERSONAL INJURY OR DEATH. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.

IMPORTANT SAFETY INSTRUCTIONS

Read these safety instructions entirely.

1. **READ AND UNDERSTAND** all safety warning procedures before operating equipment.



2. **KEEP HANDS AND FEET CLEAR**. Remove hands and feet from any moving parts.

3. **KEEP WORK AREA CLEAN**. Cluttered work areas invite injuries.

4. Consider work area environment. Do not expose equipment to rain. **DO NOT** use in damp or wet locations. Keep area well lighted.

5. **ONLY TRAINED OPERATORS** should operate this equipment. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate machine.

6. **USE MACHINE CORRECTLY**. Use machine in the proper manner.

7. **DRESS PROPERLY**. Non-skid steel-toe footwear is recommended when operating machine.



8. MAINTAIN WITH CARE. Keep unit clean

for better and safe performance. Follow manual for proper lubrication and maintenance instructions.

9. **DO NOT LOAD** this shop crane beyond it's rated capacity for each boom position.

10. Before moving the shop crane, lower the load to the lowest position possible.

11. **DO NOT** allow the load to swing violently or drop suddenly during lowering or moving.

12. This shop crane is designed for use only on hard level surfaces capable of sustaining the load.

13. **STAY ALERT**. Watch what you are doing. Use common sense. Be aware.

14. **CHECK FOR DAMAGED PARTS**. Check for condition of all moving parts, breakage of parts or any condition that may affect the machines operation. Do not use if any component is broken or damaged.

15. **NEVER** remove safety-related components or device from the machine. Do not use if safety related components are damaged or missing.

16. Unreadable and missing warning labels must be replaced immediately.

17. **NO MODIFICATIONS** should be made to this shop crane. Repairs to this equipment should be performed by a qualified technician.

18. **DO NOT OPERATE** tool if under the influence of alcohol or drugs.

19. **STAY ALERT**. Do not operate this unit when you are tired.

20. Not to be used for aircraft purposes.

UN-CRATING / PACKING INSTRUCTIONS



Carefully remove the crating and packing materials and all skid and pallet fasteners.

Be careful when cutting steel banding material as items may become loose and fall causing personal harm or injury. Always wear gloves when un-crating the machine to prevent scratches, abrasions, or cuts due to the contact with packing materials.



TOOLS REQUIRED

Adjustable Wrenches or Metric open end / combination wrenches.

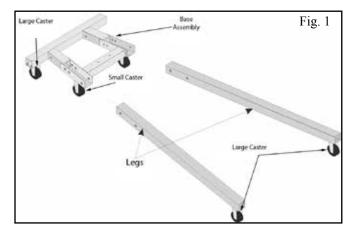


NOTE: It is recommended to use two persons during the assembly procedure.

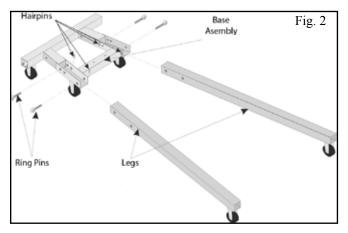
INSTALLATION INSTRUCTIONS

1. Using the Bolts and Nuts provided, attach two Large Casters to the Base Assembly and the other two Large Casters to the Legs. Then attach the two Small Casters to the Base Assembly. (See Fig. 1)

2. Using the four Ring Pins, assemble the Legs to the Base Assembly.



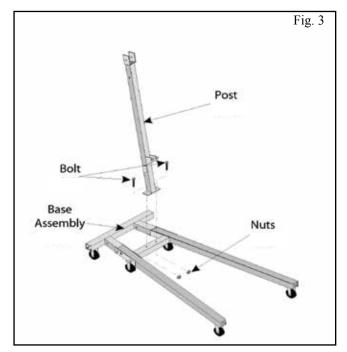
Note: Lift up on the front of the Base Assembly until the holes line up. (See Fig. 2)



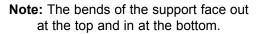
3. After the Rings Pins are inserted, insert one Hairpin through the small hole at the end of each Ring Pin until the Pin snaps in place. Make sure all Ring Pins are secure before proceeding.

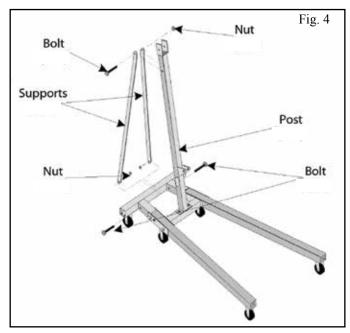
4. Secure the Post to the Base Assembly using the Bolts and Nuts. (See Fig. 3)

Note: Leave the Bolts loose until step 5.

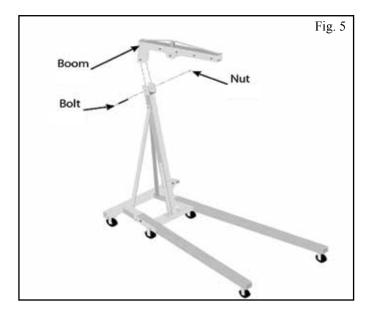


5. Assemble the Supports to the Base Assembly using the two Bolts and Nuts for the bottom of the Supports and the Bolts and Nuts for the top of the supports. Tighten the Bolts left loose during step 4 after the Supports are in Place. (See Fig. 4)

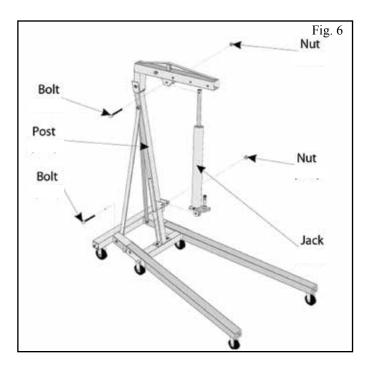




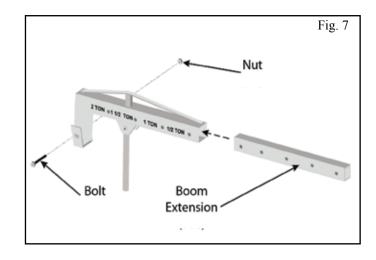
6. Attach Boom to the Post and secure with the Bolt and Nut. (See Fig. 5)



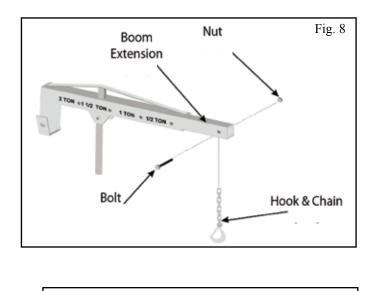
7. Assemble the lower end of the Jack to the Post using the Bolt and Nut. Secure the Top of the Jack to the Boom using the Bolt and Nut. (See Fig. 6)



8. Slide the Boom Extension into the boom and secure it at the desired load rating using the Bolt and Nut. (See Fig. 7)



9. Attach the Hook and Chain to the end of the Boom Extension using Bolt and Nut. (See Fig. 8)

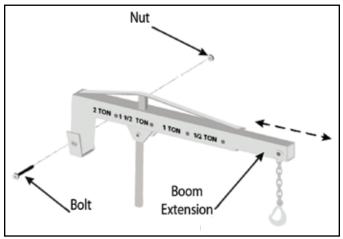




OPERATION / MAINTENANCE

 To raise the Boom Extension, close the Release Valve on the Hydraulic Ram. Then, pump the Handle until the Boom Extension reaches the desired height.
To extend the length of the Boom Extension, remove bolt and nut. Pull out the Boom Extension until you have reached the desired extension hole. Then, re-insert the bolt through the holes in the Boom and Boom Extension, and lock the bolt in place with the nut.

3. **WARNING!** Do not exceed the maximum lifting capacities of this tool. Exceeding the maximum lifting capacities could cause personal injury and/or property damage. The more the Boom Extension is extended the lower the lifting capacity of the Hydraulic Shop Crane.



4. Position the Crane so that the Hook is directly above the object you wish to lift.

WARNING

NEVER GO UNDER AN OBJECT BEING LIFTED BY THE CRANE. IT IS POSSIBLE FOR THE HOOK TO SLIP, CAUSING AN OBJECT TO FALL, POSSIBLY RESULTING IN SERIOUS INJURY AND/OR PROPERTY DAMAGE. ALWAYS MONITOR THE OBJECT BEING LIFTED SO IT DOES NOT ROCK BACK AND FORTH.

5. To lower the Crane, **SLOWLY** turn the jack's release valve counterclockwise (left). Attach the Hook to the object you are lifting and make sure the Safety Latch on the Hook is fully closed.

6. Close the Release Valve, and pump the Handle to raise the object. Carefully move the Shop Crane to the location where you wish to lower the object. Then lower the object by opening the Release Valve slightly.

7. Once the object is fully lowered, disconnect the Hook from the object.

8. After you finish, store the Shop Crane (unfolded or folded) in a clean, dry, safe location out of reach of children and other unauthorized people.

FOLDING THE FRAME

1. Lower Crane all the way.

2. Remove Hairpins from the front Ring Pins. Remove the front Ring Pins. Leave rear Ring Pins in.

3. Raise Legs.

4. Insert a front Ring Pin into the middle hole of the Base Assembly.

Note: Be certain that, when unfolding, both Ring Pins and Hairpins are placed back in the proper places.

See a video of this product here:

www.youtube.com/watch?v=7vwxowr7UIw

MAINTENANCE

1. Check all of the mounting hardware before each use and make sure it is secure before using the Shop Crane.

2. Make sure the Hook & Chain are clean of dirt, grease or debris.

3. If the Jack is not performing to satisfaction, there may be air in the hydraulic system. To purge the system of air, follow these instructions:

- Make sure the Ram is completely lowered.
- Remove the Oil Fill Plug and top off with Hydraulic Fluid.
- Raise the Ram to maximum height.
- Loosen the Release Valve and push the Ram all the way down.
- Top off with Hydraulic Fluid and replace the plug. Repeat if necessary.

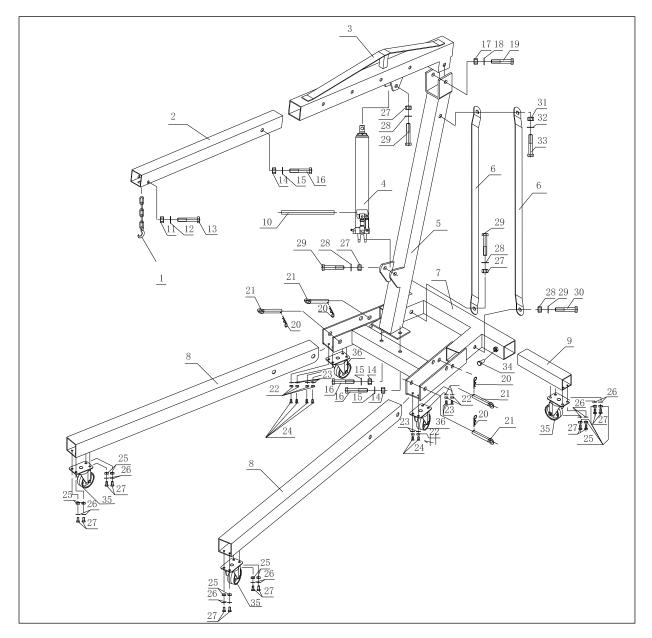
4. To clean, use a damp cloth and a mild detergent. Do not use solvents or other flammable agents.

5. If lifting performance of the Shop Crane begins to diminish, check the hydraulic oil level in the Oil Tank. If necessary, top off the Oil Tank with hydraulic oil.

RSC-2TF SPECIFICATIONS & PARTS BREAKDOWN



BOOM LENGTH	40" - 61" / 1,016mm - 1,549 mm.	
BASE LENGTH	69" / 1,753 mm.	
BOOM CAPACITIES		
	4,400 lbs. / 1,996 kg.	
	3,300 lbs. / 1,497 kg.	
	2,200 lbs. / 998 kg.	
	1,100 lbs / 499 kg.	
MAXIMUM BOOM HEIGHT		
	80" / 2,032 mm.	
	84" / 2,134 mm.	
	89" / 2,261 mm.	
	93" / 2,362 mm.	
SPECS		
	Full length: 69-1/4" / 1759 mm.	
	Top to bottom: 57" / 1448 mm.	
	Fully extended: 61" / 1549 mm.	
SHIPPING WEIGHT	220 lbs. / 100 kg.	
SHIPPING DIMENSIONS	23" x 61" x 16" / 584 mm x 1549 mm x 406 mm	



No.	Description	Qty	No.	Description	Qty	No.	Description	Qty
1	Hook	1	14	Nut M14	3	27	Bolt M8x16	16
2	Boom Extension	1	15	Washer Ø 14	3	28	Nut M16	4
3	Boom	1	16	Bolt M14 x 90	3	29	Washer Ø16	4
4	Long Ram Jack	1	17	Nut M16	1	30	Bolt M16x90	4
5	Support Post	1	18	Washer Ø 16	1	31	Nut M16	1
6	Support Brace	2	19	Bolt M16 x 110	1	32	Washer Ø16	1
7	Base	1	20	Wire-steel Cotter Pin	2	33	Bolt M16x100	1
8	Leg	2	21	Round Pin	4	34	Bolt M12x25	2
9	Base Extension	2	22	Nut M8	8	35	Caster (Ø 90mm)	4
10	Handle	1	23	Washer Ø 8	8	36	Caster (Ø 75mm)	2
11	Nut M12	1	24	Flat shoulder bolt M8x16	8			
12	Washer Ø 14	1	25	Nut M8	16			
13	Bolt M12x75	1	26	Washer Ø 8	16			

MAINTENANCE RECORDS

	NOTES
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FOR TECHNICAL SUPPORT 1-(800) 253-2363 Ext. 196 TO ORDER PARTS 1-(800) 253-2363 Ext. 191

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