

# INSTRUCTION MANUAL 1/2-2T FOLDABLE SHOP CRANE

**By: Orion Motor Tech**



***IMPORTANT:*** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL

## REQUIREMENTS, WARNINGS AND CAUTIONS.

### 1. Forward

This engine crane is intended to be used to remove, install and transport in the lowered position, rated capacity automotive and light truck engines and engine assemblies. It must be used with appropriately rated engine leveller, sling and/or chains which are NOT INCLUDED. After removing, immediately transfer the load to an appropriately rated work station such as an engine stand.

### 2. Main specifications

Capacity (kg)	500-2000	G.W.(kg)	58-95
Lifting height(mm)	2380	N.W.(kg)	56-93
Height of crane(mm)	1450	Packing size(mm)	1# 1360*315*160
Length of height(mm)	1550		2# 830*580*85

### 3. Safety instructions

- 1. Keep work area clean.** Cluttered areas invite injuries.
- 2. Observe work area conditions.** Do not use machines in damp or wet locations. Don't expose to rain. Keep work area well lit.
- 3. Keep children away.** Children must never be allowed in the work area.
- 4. Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- 5. Use the right tool for the job.** There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
- 6. Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair. Wear heavy work gloves when working. Always wear ANSI-approved impact safety goggles.
- 7. Do not overreach.** Keep proper footing and balance at all times.
- 8. Maintain tools with care.** Keep tools clean for better and safer performance. Follow instructions for lubricating and changing accessories.
- 9. Stay alert.** Do not operate any tool when you are tired.
- 10. Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function.
- 12. Replacement parts and accessories.** When servicing, use only identical replacement parts. Only use accessories intended for use with this tool.
- 13. Do not operate tool if under the influence of alcohol or drugs.**
- 14. Never exceed the maximum lifting capacity. Beware of Dynamic Loading!**

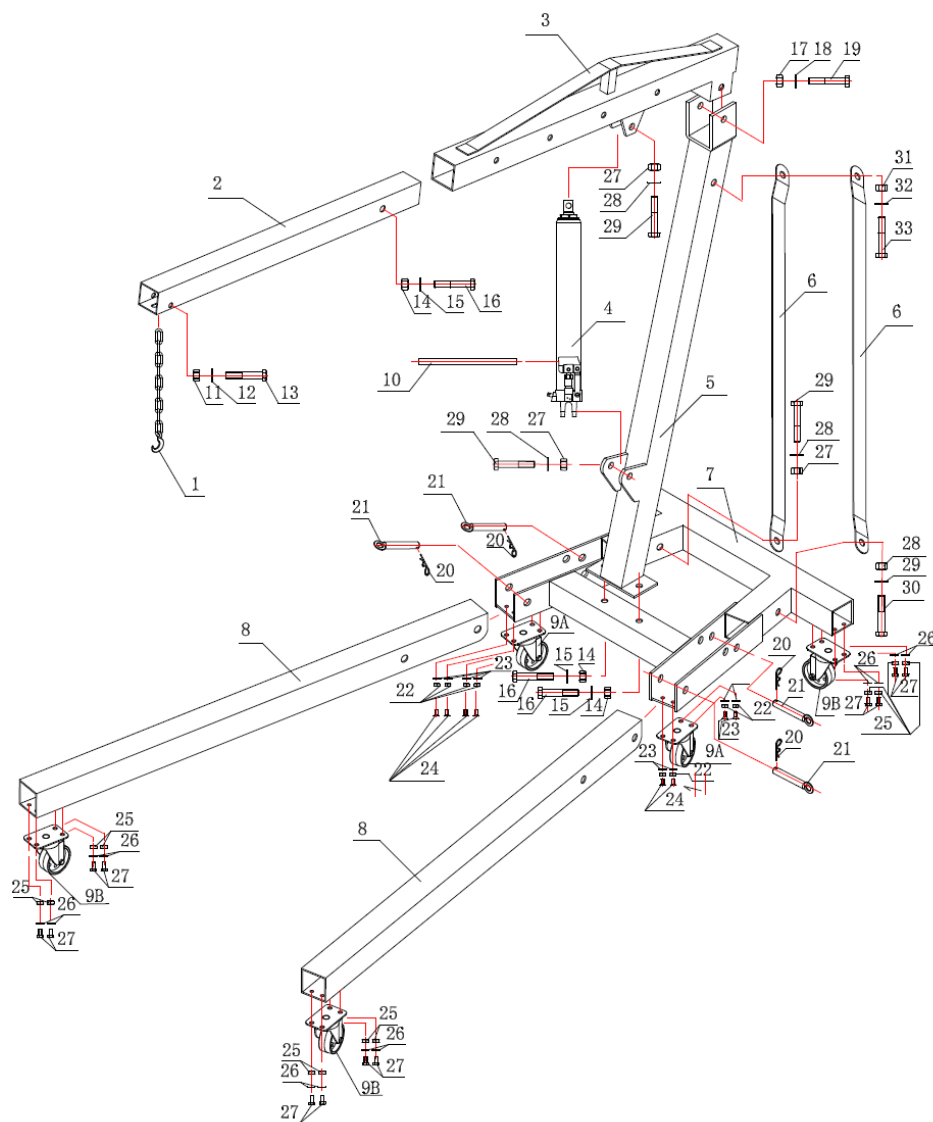
Swinging or allowing a load to suddenly jerk on the chain of the Shop Crane may create, for a brief instant, an excess load, which may result in damage to the product, damage to the load, SERIOUS PERSONAL INJURY, and/or DEATH.

**15. Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.

**16. Not to be used for aircraft purposes.**

**17. Do not attempt to move the Crane when under load.** The Swivel Casters are not designed to be rolled when the Crane is lifting a weight.

## 4. Main construction



PART NO	DESCRIPTION	QTY	PART NO	DESCRIPTION	QTY
1	Hook	1	17	Nut M16	1
2	Extension boom	1	18	Washer $\Phi$ 16	1
3	Boom	1	19	Bolt M16x110	1
4	Long ram jack	1	20	Wire-steel cotter pin	2
5	Support post	1	21	Round pin	4
6	Support brace	2	22	Nut M8	8
7	Base	1	23	Washer $\Phi$ 8	8

8	Leg	2	24	Flat shoulder bolt M8x16	8
9A	Caster wheel( Φ75mm)	2	25	Nut M8	16
9B	Caster wheel( Φ90mm)	4	26	Washer Φ8	16
10	Handle	1	27	Bolt M8x16	16
11	Nut M12	1	28	Nut M16	4
12	Washer Φ12	1	29	Washer Φ16	4
13	Bolt M12x75	1	30	Bolt M16x90	4
14	Nut M14	3	31	Nut M16	1
15	Washer Φ14	3	32	Washer Φ16	1
16	Bolt M14x90	3	33	Bolt M16x100	1

## 5. Operation instruction

- 1.To **raise** the Extension Boom, close the Release Valve on the Hydraulic Ram. Then, pump the Handle until the Extension Boom reaches the desired height.
- 2.To **extend the length** of the Extension Boom, remove bolt and nut. Pull out on the Extension Boom until the desired extension hole in the Boom aligns with the hole in the Extension Boom.Then re-insert the bolt through the holes in the Boom and Extension Boom, 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 longer the Extension Boom is extended, the lower the lifting capacity of this Foldable Shop Crane.**
4. Position the Foldable Shop Crane so that the Hook is directly above the object you wish to lift.
5. **WARNING! Stay clear of the Foldable Shop Crane.** 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.
6. Open the Release Valve slightly to lower the Hook. Attach the Hook to the object you are lifting, and make sure the Safety Latch on the Hook is fully closed. Then close the Release Valve, and pump the Handle to raise the object. Carefully move the Foldable Shop Crane to the location where you wish to lower the object, i.e., an engine stand, proper support, floorsurface, etc. Then lower the object by opening the Release Valve slightly.
- 7.Once the object is fully lowered, disconnect the Hook from the object. Then store the Foldable Shop Crane (unfolded or folded) in a clean, dry, safe location out of reach of children and other unauthorized people.

## 6. 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.
  - a. Make sure the Ram is completely lowered.
  - b. Remove the Oil Fill Plug and top off with Hydraulic Fluid.
  - c. Raise the Ram to maximum height.
  - d. Loosen the Release Valve and push the Ram all the way down.
  - e. 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 Foldable Shop Crane begins to diminish, check the hydraulic oil level in the Oil Tank. If necessary, top off the Oil Tank with hydraulic oil.