



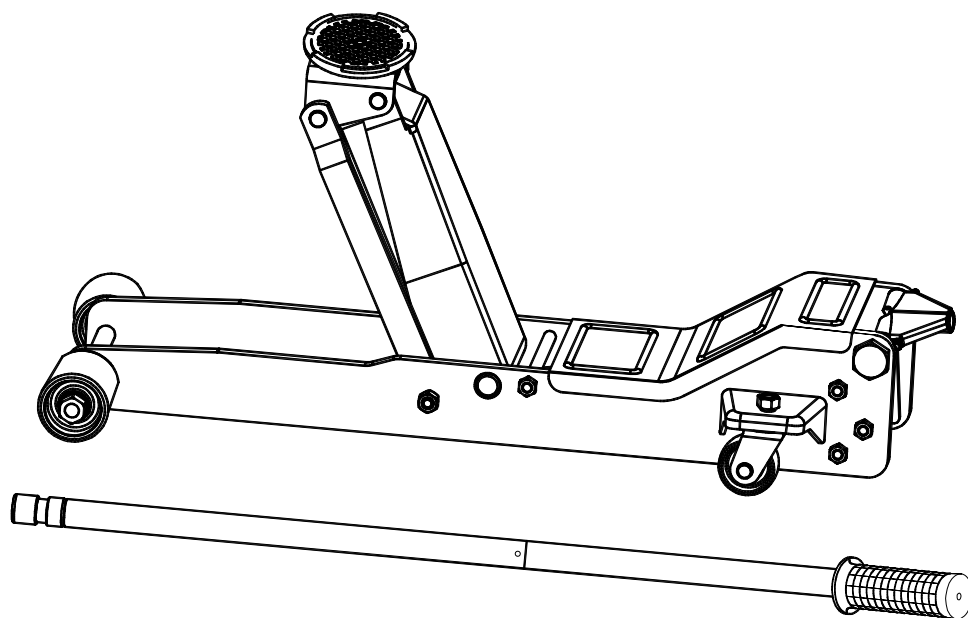
**LIGHTNING  LIFT**

# **Low Profile Service Jack**

## **Operating Instructions & Parts Manual**

**Model Number  
JSA200LCX**

**Capacity  
2 Ton**



**MAC TOOLS INC. ©2005**  
505 N. Cleveland Ave. Suite 200  
Westerville, OH 43082

**Save these instructions.** For your safety, read, understand, and follow the information provided with and on this jack. The owner and operator of this equipment shall have an understanding of this jack and safe operating procedures before attempting to use. The owner and operator shall be aware that use and repair of this product may require special skills and knowledge. Instructions and safety information shall be conveyed in the operator's native language before use of this jack is authorized. If any doubt exists as to the safe and proper use of this jack, remove from service immediately. **Inspect before each use.** Do not use if broken, bent, cracked, or damaged parts (including labels) are noted. Any jack that appears damaged in any way, operates abnormally or is missing parts, shall be removed from service immediately. If the jack has been or suspected to have been subjected to a shock load (a load dropped suddenly, unexpectedly upon it), immediately discontinue to use until jack has been checked by a factory authorized service center. It is recommended that an annual inspection be done by qualified personnel. Labels and Operator's Manual are available from manufacturer.

### PRODUCT DESCRIPTION

Mac Tools Low Profile Service Jack is designed to lift, **not** sustain, rated capacity loads. It is designed to be used in conjunction with jack stands. This service jack has a unique feature which provides fast, no load lifts to the jacking point. The low profile design fits easily and safely under vehicle with low clearance. **Intended use:** To lift one wheel or axle of a vehicle for the purpose of service and/or repair of vehicle components. After lifting, loads must be immediately supported by appropriately rated jack stands. Check with vehicle owner's manual for proper lift points.

**DO NOT USE TO DOLLY OR MOVE VEHICLE. DO NOT USE FOR ANY PURPOSE OTHER THAN THOSE USES OUTLINED ABOVE !**

### SPECIFICATIONS

Model	Capacity	Jack Size (L x W x H)	Min. Height	Max. Height	Handle Length	Net Weight
JSA200LCX	2 Ton	42 1/2" x 13 3/4" x 6 3/4"	2 1/2"	20"	52"	116 lbs

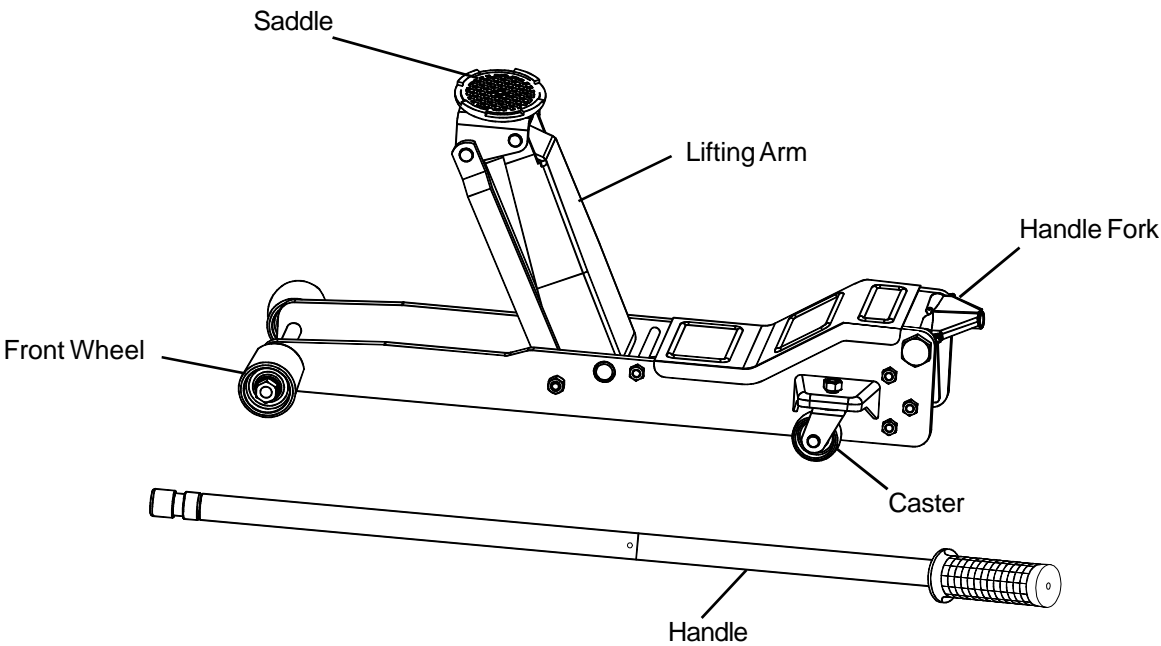


Figure 1- Model JSA200LCX Components

## **BEFORE USE** (refer to Fig.1 and Replacement Parts Illustrations for location of components)

1. Verify that the product and the application are compatible.
2. Before using this product, read the operator's manual completely and familiarize yourself thoroughly with the product, its components and recognize the potential hazards associated with its use.
3. Secure handle in the handle fork with handle lock fastener. Open the release valve by turning the handle counterclockwise (no more than 1/2 full turn).
4. With saddle fully lowered, locate and remove the vent screw. Ensure the oil level is within ~ 3/16" from the inner cylinder as viewed from the vent screw. Reinstall the vent screw. Close release valve by turning the handle clockwise until firm resistance is felt.
5. Check to ensure that jack rolls freely, that the pump and release valve operates smoothly, raises and lowers the unloaded saddle throughout the advertised lift range before putting into service.
6. Replace worn or damaged parts and assemblies with Mac Tools Replacement Parts only. (See Replacement Parts Section). Lubricate as instructed in Maintenance Section.

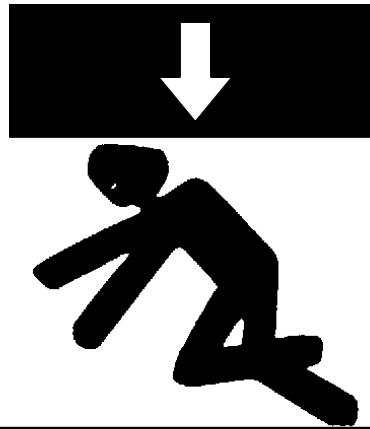
## **! WARNING**

- Study, understand, and follow all instructions provided with and on this device before use.
- Do not exceed rated capacity.
- Lift only on areas of vehicle as specified by the vehicle manufacturer.
- Do not use adapters or accessories that are not provided initially.
- This is a lifting device only.
- After lifting, immediately transfer the load to appropriately rated vehicle stands.
- Never work on, under, or around a load supported by this device.
- Use only on hard, level surfaces capable of sustaining rated capacity loads.
- Do not move or dolly loads with this device.
- Do not modify this device.
- Failure to heed these markings may result in personal injury and/or property damage.

## **ASSEMBLY**

Little, if any, assembly is required of these jacks. Always secure the handle into the handle fork with handle lock fastener. Familiarize yourself with the illustrations in the operator's manual. Know your jack and how it operates before attempting to use.

## **! WARNING**



To avoid crushing and related injuries:  
**NEVER** work on, under or around a load supported only by a jack. **ALWAYS** use adequately rated jack stands.

## **! SAFETY MESSAGE !**

Lift only on areas of the vehicle as specified by the vehicle manufacturer.  
Do not use adapters or accessories that are not provided initially.

## **OPERATION**

### **Lifting**

1. Place vehicle in park, with emergency brake on and wheels securely chocked to prevent inadvertent vehicle movement.
2. Locate and close release valve by turning handle clockwise, firmly. Center jack saddle under lift point.
3. Verify lift point, then use handle pump to contact lift point. To lift, pump handle until load reaches desired height.
4. Transfer the load immediately to appropriately rated jack stands.

## OPERATION (continued)

### Lowering

1. Raise load high enough to clear the jack stands, then carefully remove jack stands (**always** used in pairs).
2. Slowly turn the handle counterclockwise, but no more than 1/2 turn. **If the load fails to lower:**
  - a. Use another jack to raise the vehicle high enough to reinstall jack stands.
  - b. Remove the affected jack and then the stands.
  - c. Using the other jack, lower the load by turning the operating handle counterclockwise, but no more than 1/2 turn.
3. After removing jack from under the load, push saddle down to reduce ram exposure to rust and contamination.

## MAINTENANCE

**Important:** Use only a good grade hydraulic jack oil. Avoid mixing different types of fluid and **Never** use brake fluid, turbine oil, transmission fluid, motor oil or glycerin. Improper fluid can cause failure of the jack and the potential for sudden and immediate loss of load. We recommend Mobil DTE 13.

### Adding oil

1. With saddle fully lowered set jack in its upright, level position. Locate and remove vent screw.
2. Fill with oil until ~3/16" above the inner cylinder as seen from the vent screw hole. Reinstall the vent screw.

### Changing oil

For best performance, replace the complete fluid supply at least once per year.

1. With saddle fully lowered, remove the vent screw.
2. Lay the jack on its side and drain the fluid into a suitable container.

**Note:** Dispose of hydraulic fluid in accordance with local regulations.

3. Fill with oil until ~3/16" above the inner cylinder as seen from the vent screw hole. Reinstall the vent screw.

### Lubrication

A periodic coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that wheels, casters and pump assemblies move freely.

### Cleaning

Periodically check the pump piston and ram for signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

**Note:** Never use sandpaper or abrasive material on these surfaces !

### Storage

When not in use, store the jack with saddle fully lowered.

## TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	<ul style="list-style-type: none"><li>• Release valve not tightly closed</li><li>• Overload condition</li></ul>	<ul style="list-style-type: none"><li>• Ensure release valve tightly closed</li><li>• Remedy overload condition</li></ul>
Jack bleeds off after lift	<ul style="list-style-type: none"><li>• Hydraulic unit malfunction</li></ul>	<ul style="list-style-type: none"><li>• Contact Mac Tools Tech. Service</li></ul>
Jack will not lower after unloading	<ul style="list-style-type: none"><li>• Reservoir overfilled</li><li>• Linkages binding</li></ul>	<ul style="list-style-type: none"><li>• Drain fluid to proper level</li><li>• Clean and lubricate moving parts</li></ul>
Poor lift performance	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li></ul>
Will not lift to full extension	<ul style="list-style-type: none"><li>• Fluid level low</li></ul>	<ul style="list-style-type: none"><li>• Ensure proper fluid level</li></ul>

## ONE YEAR LIMITED WARRANTY

For a period of one (1) year from date of purchase, **MAC TOOLS, Inc.** will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship, or which fails to conform to any implied warranty not excluded hereby.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to **Mac Tools Inc.** Warranty Service Department, 505 N. Cleveland Ave. Suite 200 Westerville, OH 43082.

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Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## REPLACEMENT PARTS

**Available Parts:** Please refer to the parts drawing when ordering parts. Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give Model number, parts number and description below. Write for current pricing: MAC TOOLS, Inc. 505 N. Cleveland Ave. Suite 200 Westerville, OH 43082 U.S.A. Tel: 1800-MAC-TOOL (622-2665)

Model # JSA200LCX

Reference No.	Part No.	Description	Quantity
1	G880-50005-0880	Saddle Pad	1
2	G863-10003-1001	Saddle	1
3	G863-30000-0660	Hydraulic Unit	1
4	G86301-0004	Front Wheel Assembly	-
5	G86301-0003	Rear Caster Assembly	-
6	G738-00001-0040	Handle Grip	1
7	G86301-0002	Handle Assembly	-
8	G863-40001-1000	Handle Fork	1
9	G620-43000-0000	Handle Lock Fastener	1
10	G863-33000-0420	U-joint	1
11	G62S-03300-200	Vent Screw	1
12	G880-20007-0410	Return Spring	2
13	G863-20001-1000	Cover	1
--	G86301-0005	Hardware Kit	-
--	JSA200LCX-L0	Label(s) (not shown)	1
--	JSA200LCX-M0	Manual	1

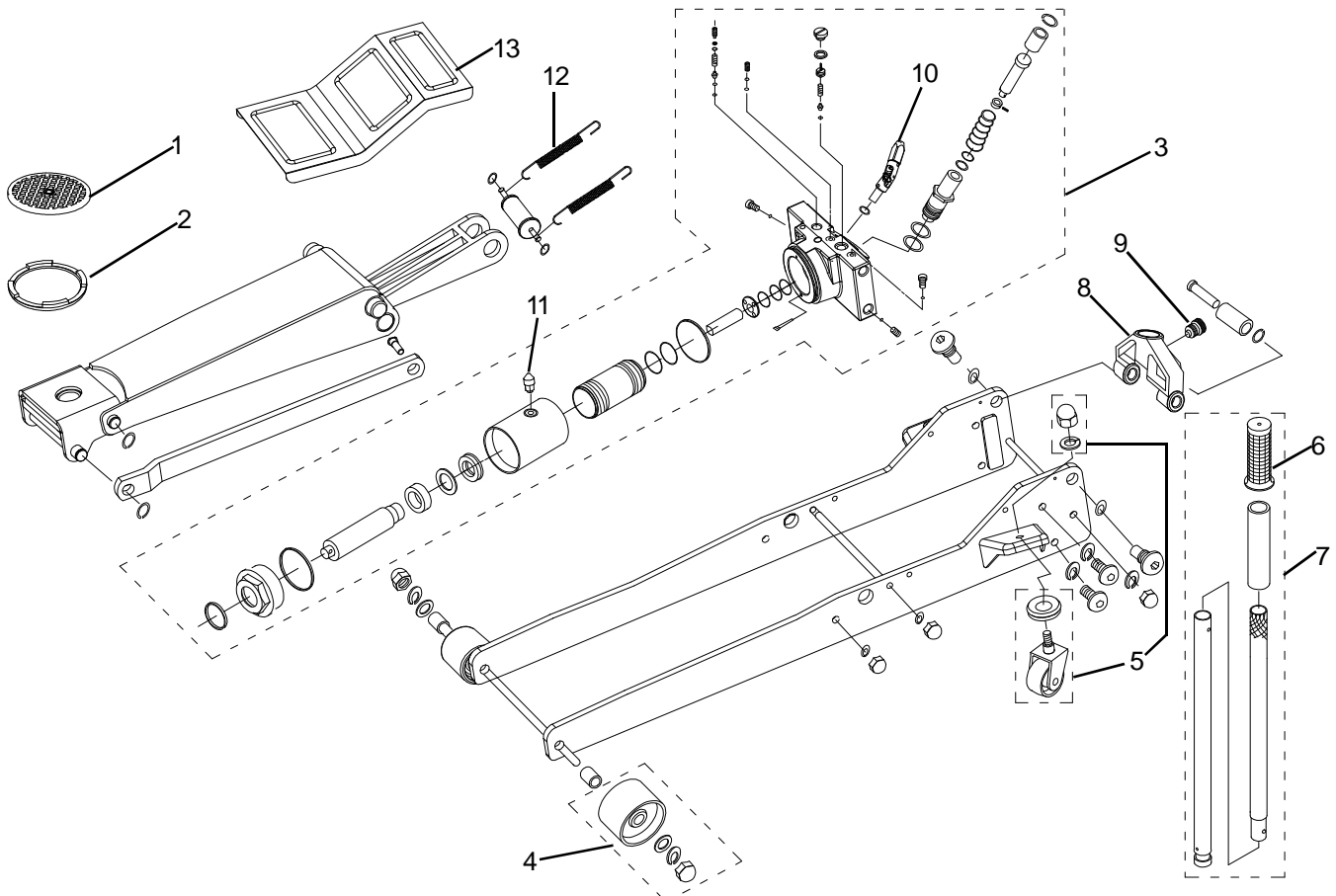
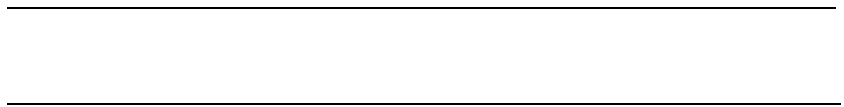


Figure 2. JSA200LCX Parts Illustration

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