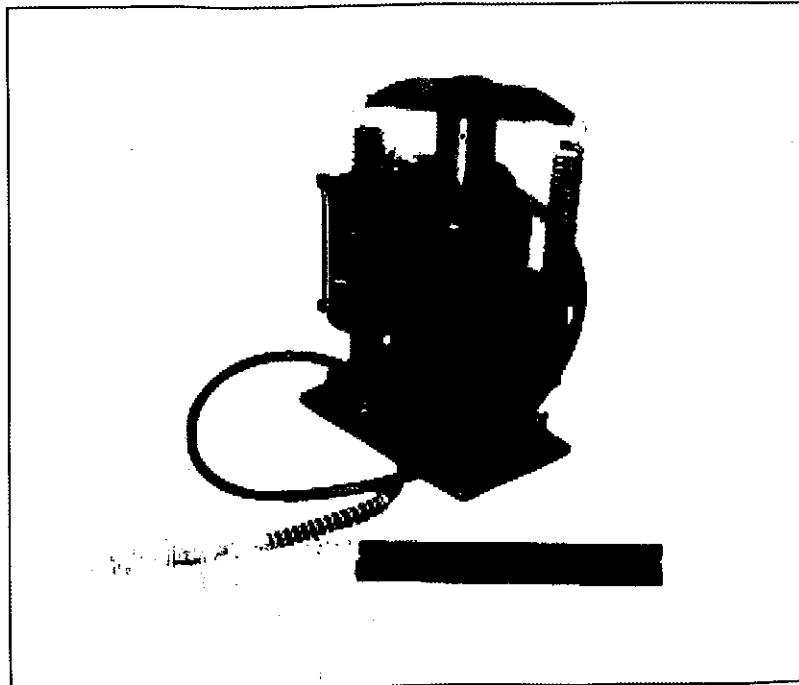




## Assembly & Instruction Manual **ITEM 3199**



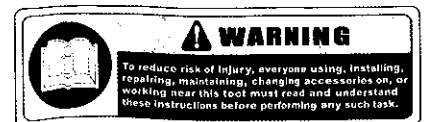
# 20 TON AIR/HAND JACK

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You can purchase additional items at  
[www.cumminstools.com](http://www.cumminstools.com)

**SAVE THIS MANUAL FOR FUTURE REFERENCE**



Customer Service Postal Address:  
1290 35 Road  
Minden, NE 68959  
Voice: 1-(308) 832-2070  
Fax: 1-(308) 832-2069



Your new 20 Ton Air/Hand Jack has been engineered and manufactured to Cummins Industrial Tools high standards for dependability, ease of operation, and operator safety. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your machine properly and only for what it is intended, you will enjoy years of safe, reliable service.

## SAFETY WARNINGS AND PRECAUTIONS

**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment. Read all instructions before using the tool!

- **Work area conditions.** Cluttered areas invite injuries.
- **Additional work area conditions.** Do not use machines or power tools in damp or wet locations. Do not expose to rain. Keep work area well lighted.
- **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- **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.
- **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. 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.
- **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
- **Use eye protection.** Always wear ANSI approved impact safety glasses underneath a full face shield during use. Also, wear heavy duty work gloves.
- **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
- **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. The handles must be kept clean, dry, and free from oil and grease at all times.
- **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before starting work.
- **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- **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. Any part that is damaged should be replaced.
- **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Cummins Industrial Tools.
- **Do not operate tools if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

**WARNING:** The warnings, cautions, and instructions discussed in this instruction manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which can not be built into this product, but must be supplied by the operator.

## PRODUCT DESCRIPTION

- Air actuated / hydraulic hand jack is designed for lifting, but not sustaining, loads over the rated capacity of the jack. They can be used vertically or angled to 5 degrees from vertical position. After lifting, loads must be immediately supported by appropriate means. Each model is suitable for use in an appropriately rated and designed vertical or bench press structure. This jack is not recommended for use in lifting or positioning houses and/or other building structures.
- Product specification:
  - Capacity: 20 TON
  - Base size: 8-11/16" x 6-1/2"
  - Min. lifting height: 10-7/16"
  - Max. lifting height: 20"

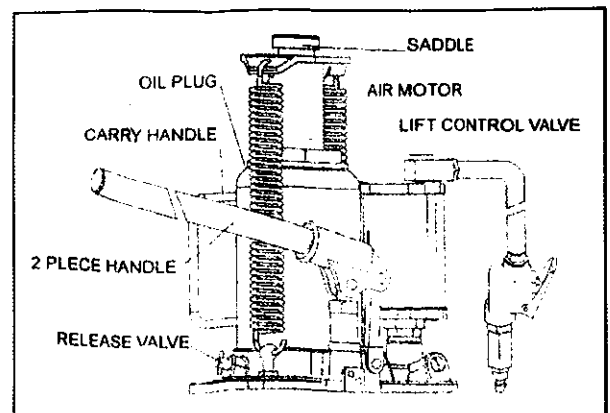
## BEFORE USE

- Verify that the product and the application are compatible, if in doubt contact the seller.
- Before using this product, read the owner's manual completely and familiarize yourself thoroughly with the product and the hazards associated with its improper use.
- Open the release valve (counter-clockwise no more than 2 full turns).
- With ram fully retracted, locate and remove the oil filler plug. Insert the handle into the handle sleeve, then pump 6 to 8 strokes. This will help release any pressurized air which may be trapped within the reservoir.
- Ensure the oil level is just below the oil filler plug hole. Re-install the oil filler plug.
- Pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve (See illustration). Connect to air supply and operate for 3 seconds to evenly distribute lubricant.
- Check to ensure that jack rolls freely (if so equipped) and that the pump operates smoothly before putting into service. Replace worn or damaged parts and assemblies with seller's only.
- This product is fitted to accept the popular 1/4" NPT air nipple. When installing 1/4" NPT nipple of your choice, ensure that thread tape or compound is used when servicing connections.
- Inspect before each use. Do not use if bent, broken or cracked components are noted.

## BEFORE USE

### Lifting

- 1- Assemble 2 pc handle. Ensure that spring clips align with slots.
- 2- Secure the load to prevent inadvertent shifting and movement.
- 3- Position the jack near desired lift point.
- 4- Close the release valve by turning it clockwise until it is firmly closed.



**CAUTION:** USE THE HANDLE PROVIDED WITH THIS PRODUCT OR AN AUTHORIZED REPLACEMENT HANDLE TO ENSURE PROPER RELEASE VALVE OPERATION. DO NOT USE AN EXTENDER ON THE AIR HOSE NOR THE OPERATING HANDLE. WHEN USING TO LIFT VEHICLE, LIFT ONLY ON THE MANUFACTURER'S RECOMMENDED LIFT POINT AND IN ACCORDANCE WITH THE PUBLISHED GUIDELINES IN YOUR VEHICLE OWNERS MANUAL. ALWAYS USE JACK STANDS TO SUPPORT THE LOAD IMMEDIATELY AFTER LIFTING.

5- Insert and secure handle into handle sleeve. Pump handle or squeeze the lift control valve until saddle contacts load. To end air operation, simply release the grip on the lift control valve. NEVER WIRE, CLAMP OR OTHERWISE DISABLE THE LIFT CONTROL VALVE TO FUNCTION BY ANY MEANS OTHER THAN BY USING THE OPERATOR'S HAND.

6- Raise load to desired height, then immediately transfer the load to appropriately-rated support devices such as jack stands.

**WARNING:** THIS IS A LIFTING DEVICE ONLY. IT IS DESIGNED TO LIFT PART OF THE TOTAL VEHICLE (ONE WHEEL OR AXLE). ALWAYS WEAR SAFETY GLASSES WHEN USING THIS EQUIPMENT. CENTER LOAD ON SADDLE BEFORE LIFTING. NEVER WORK ON, UNDER OR AROUND LOAD UNTIL IT IS PROPERLY SUPPORTED. TRANSFER THE LOAD IMMEDIATELY TO APPROPRIATELY-RATED JACK STANDS. DO NOT USE THIS PRODUCT FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS INTENDED. IT IS OWNER'S RESPONSIBILITY TO KEEP LABELS AND INSTRUCTIONAL MATERIAL LEGIBLE AND AVAILABLE. REPLACEMENT LABELS AND MANUALS ARE AVAILABLE FROM THE MANUFACTURER. FAILURE TO HEED THESE AND ALL OTHER WARNING PERTAINING TO THIS PRODUCT CAN RESULT IN SUDDEN LOSS OF LIFTED LOAD RESULTING IN DEATH, PERSONAL INJURY OR PROPERTY DAMAGE.

## **Lowering**

1- Raise load enough to carefully remove jack stands.

2- Insert handle onto release valve and slowly turn handle counter-clockwise, but not more than 1/2 turn. If load fails to lower, carefully transfer the load to another lifting device and jack stands. Carefully remove affected jack, and then the jack stands. Lower the load, again by slowly turning the release valve no more than 1/2 turn.

3- After removing jack from under the load, push ram and handle sleeve down to reduce exposure to rust and contamination.

# MAINTAINANCE

**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 premature failure of the jack and the potential for sudden and immediate loss of load.

## **Adding oil**

- 1- With saddle fully lowered and pump piston fully depressed, set jack in its upright, level position. Remove oil filler plug.
- 2- Fill until oil is level with the filler plug hole, reinstall oil filler plug.

## **Changing oil**

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

- 1- With saddle fully lowered and pump piston fully depressed, remove the oil filler plug.
- 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 good quality jack oil. Reinstall oil filler plug. We recommend Mobil DTE 13 or equivalent.

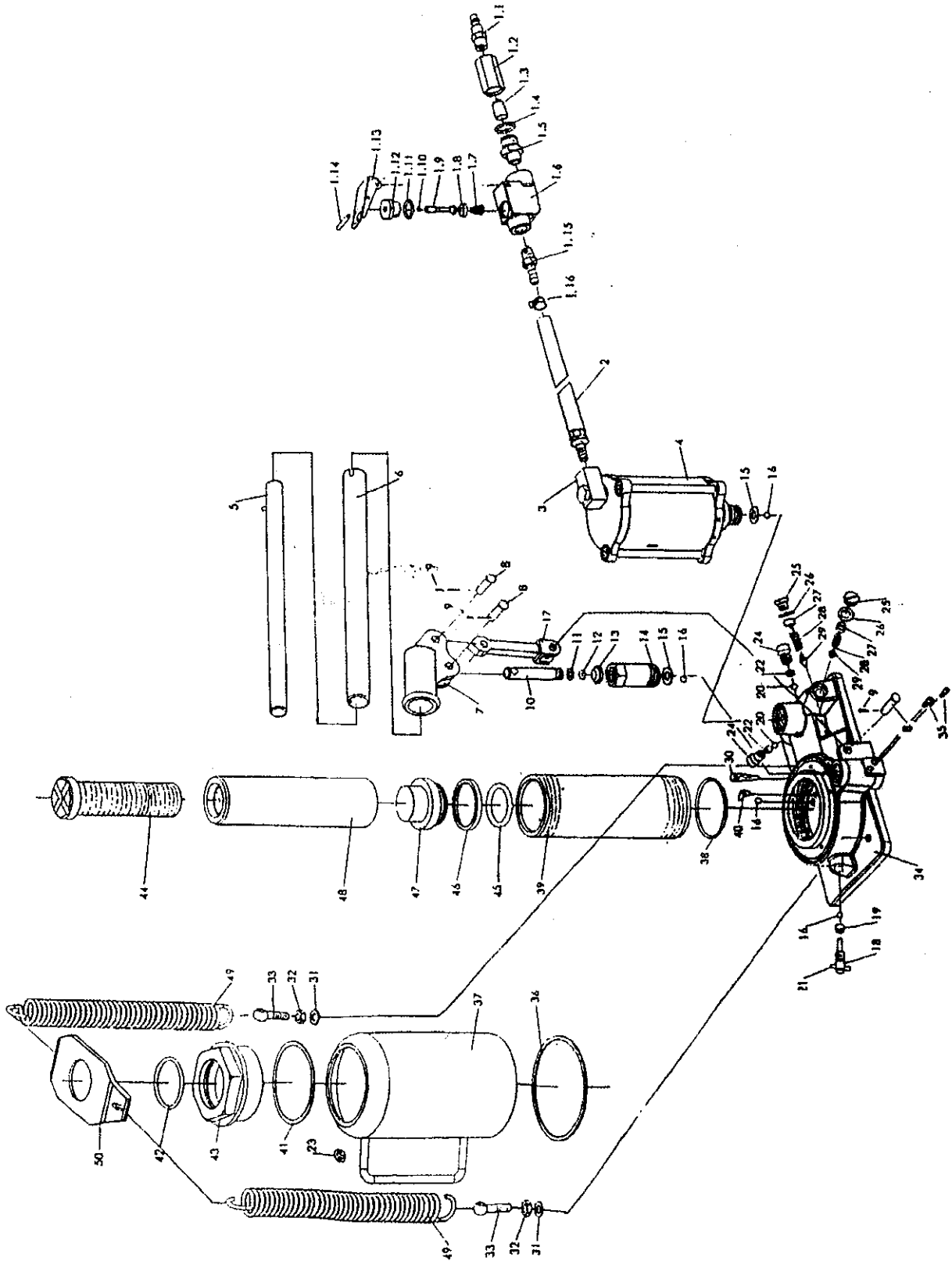
## **Lubrication**

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

**NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES!**

- 3- When not in use, store the jack with pump piston and ram fully retracted.

# EXPLODED VIEW



## PARTS LIST

NO.	DESCRIPTION	QTY		NO.	DESCRIPTION	QTY	
		QYL12D QYL20D	QYL20W			QYL12D QYL20D	QYL20W
1.1	hose connector	1	1	19	release valve seal	1	1
1.2	connecting nut	1	1	20	steel ball 6.35	1	1
1.3	air filter	1	1	21	pin	1	1
1.4	"O" ring 18×24	1	1	22	valve spring	2	2
1.5	connector	1	1	23	filler plug	1	1
1.6	valve body	1	1	24	screw	2	2
1.7	spring	1	1	25	plug screw	1	2
1.8	packing	1	1	26	plung washer	1	2
1.9	throttle	1	1	27	overload valve screw	1	2
1.10	"O" ring 3×1.6	1	1	28	safety valve spring	1	2
1.11	"O" ring 18×2.4	1	1	29	overload tapering valve	1	2
1.12	nut	1	1	30	filter net	2	2
1.13	lever	1	1	31	spring waschr 8	2	2
1.14	lever rin	1	1	32	nut 8	2	2
1.15	hose connector	1	1	33	bolt M8×35	2	2
1.16	hose band	2	2	34	base	1	1
2	air hose	1	1	35	plug screw	4	4
3	connector	1	1	36	cylinder bottom seal	1	1
4	air pump	1	1	37	reservoir	1	1
5	handle upper	1	1	38	packing	1	1
6	handle lower	1	1	39	cylinder	1	1
7	plunger	1	1	40	steel ball retainer	2	2
8	shaft pin	3	3	41	cylinder top seal	1	1
9	cotter pin	3	3	42	"O" ring	1	1
10	pump plunger	1	1	43	top nut	1	1
11	pump plunger retainer	1	1	44	extension screw	1	1
12	"O" ring	1	1	45	"O" ring	1	1
13	dust proof ring	1	1	46	"O" ring returner	1	1
14	pump reservoir	1	1	47	ram header	1	1
15	copper washer	1	1	48	ram	1	1
16	steel ball 6	6	6	49	spring	2	2
17	plunger connecting rod	1	1	50	spring plate	2	2
18	release valve screw	1	1				

# TROUBLESHOOTING

Symptom	Possible Causes	Corrective Action
Jack will not lift load	Release valve not tightly closed Overload condition Air supply inadequate	Ensure release valve tightly closed Remedy overload condition Ensure adequate air supply
Jack bleeds off after lift	Release valve not tightly closed Overload condition Hydraulic unit malfunction	Ensure release valve tightly closed Remedy overload condition Contact seller
Jack will not lower after unloading	Reservoir overfilled Linkages binding	Drain fluid to proper level Clean and lubricate moving parts
Poor lift performance	Fluid level low Air trapped in system	Ensure proper fluid level With ram fully retracted, remove oil filler plug to let pressurized air escape. reinstall oil filler plug
Will not lift to full extension	Fluid level low	Ensure proper fluid level