



# **YELLOW JACKET**



## **OPERATOR'S MANUAL**

**10399**

**20 TON**

**LOW PROFILE AIR BOTTLE JACK**



15270 Flight Path Drive • Brooksville, FL 34604

Phone (352) 754-1117 • Toll Free (800) 352-9852 • Fax (352) 754-4508

[www.esco.net](http://www.esco.net) • [sales1@esco.net](mailto:sales1@esco.net)

## SPECIFICATIONS

Lifting Capacity	Min. Height	Max. Height	Net Weight	Air Pressure
US Tons	in.	in.	Lbs.	psi
20	5.83	10.25	9.5	100-145

## OWNER/OPERATOR RESPONSIBILITY

It is the owner/operator responsibility to properly use and maintain this equipment and the legibility of all warnings and instruction labels. Carefully read and understand the instructions and warnings in this manual before operating this equipment. Keep this manual in a safe location for future reference.

 <b>WARNING</b> 	
<b>FAILURE TO HEED THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE AND OR PERSONAL INJURY.</b>	
<ul style="list-style-type: none"> <li>-Support load by appropriate means after lifting</li> <li>-Do not exceed rated capacity.</li> <li>-Center load on the jack.</li> <li>-Only use attachments and/or adapters supplied with or sold specifically for the jack.</li> <li>-Only lift areas of the vehicle designated by the vehicle manufacturer.</li> </ul>	<ul style="list-style-type: none"> <li>-Use as lifting device only.</li> <li>-Use only on hard, level surface.</li> <li>-Do not modify jack.</li> </ul>

## INSPECTION

Prior to each use, visually inspect for leaking hydraulic oil, damaged, loose or missing parts. If jack is worn or damaged remove from service and contact your nearest service center for repair.

## MAINTANENCE

Check oil level. With the jack in an upright position and the ram completely retracted, open the release valve (turn counter-clockwise) and remove the filler plug. The oil level should be just up to the hole. Fill if necessary with cleanhydraulic jack oil.

Lubricate internal components. With the release valve open, manually pump the handle six times.

Purge the hydraulic system of air. During transit the unit may become "air-bound", causing a spongy ram action. To purge the system, close the release valve (turn clockwise). Manually pump the jack to full height. Open the release valve and push down on the ram. Repeat these steps if necessaty to completely purge the system.

Keep the jack clean. Occasionally lubricate the handle socket pivot point, extension screw, release screw thread, and air valve to prevent corrosion.

## OPERATION

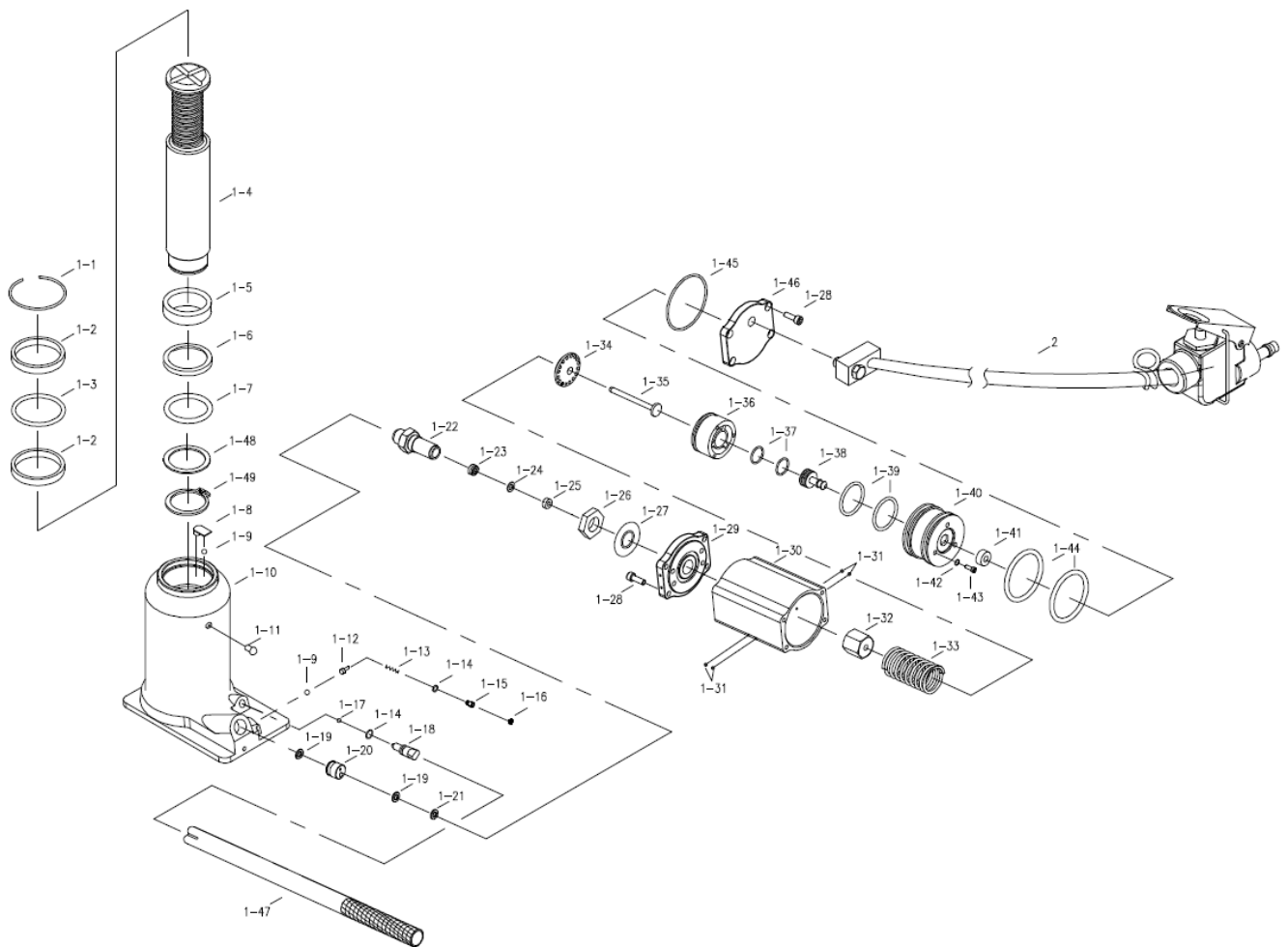
1. Jack operation is contolled either manually or by extlema air pressure. Either insert the handle into the handle socket to manually operate or connect to an external air pressure source (clean connections prior to assembly).
2. To raise the jack, turn the release valve clookwise until tight and either manually pump with the provided handle or while connected to an air supply depress the air valve.

 <b>WARNING</b> 	
<b>FOR YOUR SAFETY</b>	
<b>USE JACK FOR LIFTING ONLY. LOAD MUST BE SUPPORTED IMMEDIATELY BY OTHER APPROPRIATE MEANS.</b>	

3. To lower the jack turn the release valve counter clockwise slightly and very slowly. Be carefull not to turn valve quickly or more than twice, otherwise, dangerous sudden lowering may occur.

# TROUBLE SHOOTING

Symptom	Causes	Remedy
Jack will not lift the load.	<ol style="list-style-type: none"> <li>1. The release valve is not tightly closed.</li> <li>2. The jack is overloaded.</li> <li>3. inadequate air SUPPIV</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten the release valve</li> <li>2. Rectify the overload condition.</li> <li>3 Check and ensure adequate air Supply.</li> </ol>
Jack bleeds off after lifting.	<ol style="list-style-type: none"> <li>1. The release valve is not tightly closed.</li> <li>2. The jack is overloaded</li> <li>3. The hydraulics unit malfunctions.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten the release valve.</li> <li>2. Rectify the overload condition</li> <li>3. Contact the local service center.</li> </ol>
Jack will not lower after Unloading.	<ol style="list-style-type: none"> <li>1. The reservoir is over filled with Hydraulic fluid.</li> <li>2. Linkage binding.</li> </ol>	<ol style="list-style-type: none"> <li>1 Drain fluid to the proper oil level.</li> <li>2. Clean and lubricate moving parts.</li> </ol>
Poor lifting performance.	<ol style="list-style-type: none"> <li>1. Low fluid level.</li> <li>2. Air is trapped inside the hydraulic system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure proper fluid level.</li> <li>2. With the ram retracted. Remove the oil filler plug. Pump the jack with the release valve open to pressurize the air Reinstall the oil filler Plug.</li> </ol>
The jack will not lift to its maximum height.	Low fluid level.	Ensure proper fluid level.



## PARTS LIST

No.	Description	Q'TY	No.	Description	Q'TY
1-1	Snap Ring	1	1-26	Nut	1
1-2	Bushing	2	1-27	Butterfly Spring	1
1-3	O-ring	1	1-28	Screw	8
1-4	Ram Assy.	1	1-29	Base Cover	1
1-5	Piston Ring	1	1-30	Air Motor Housing	1
1-6	Washer	1	1-31	Steel Ball	4
1-7	O-ring	1	1-32	Nut	1
1-8	Ball retainer	1	1-33	Spring	1
1-9	Steel Ball	2	1-34	Washer	1
1-10	Oil Pump Welding Parts	1	1-35	Air Pump Plunger	1
1-11	Oil Filler Plug	1	1-36	Air Piston Base	1
1-12	Ball Seat	1	1-37	O-ring	2
1-13	Safety Valve Spring	1	1-38	Air Shuttle Valve	1
1-14	O-ring	2	1-39	O-ring	2
1-15	Pressure Adjusting Screw	1	1-40	Air Piston	1
1-16	Cap	1	1-41	Shuttle Valve Seal*	1
1-17	Steel Ball	1	1-42	O-ring	3
1-18	Release Rod	1	1-43	Screw	3
1-19	Cooper Washer	2	1-44t	O-ring	2
1-20	Valve Block Assy.	1	1-45	O-ring	1
1-21	Nylon Gasket	1	1-46	Top Cover	1
1-22	Pump Cylinder	1	1-47	Release Oil Handle	1
1-23	Y-ring	1	1-48	O-ring Retainer	1
1-24	Nylon Gasket	1	1-49	Snap Ring	1
1-25	Copper Washer	1	2	Air Hose Assy.	1