

AIRBJ20

20 Ton Multi-Purpose Hydraulic Jack

INSTRUCTION MANUAL



READ ALL INSTRUCTIONS AND WARNINGS BEFORE USING THIS PRODUCT.

This manual provides important information on proper operation & maintenance. Every effort has been made to ensure the accuracy of this manual. These instructions are not meant to cover every possible condition and situation that may occur. We reserve the right to change this product at any time without prior notice.

**IF THERE IS ANY QUESTION ABOUT A CONDITION BEING SAFE OR UNSAFE,
DO NOT OPERATE THIS PRODUCT!**

DO NOT RETURN THIS PRODUCT TO THE RETAILER - CONTACT CUSTOMER SERVICE.

If you experience a problem, have questions or need parts for this product, call Customer Service at 1-888-287-6981, Monday-Friday, 8 AM - 4 PM Central Time. A copy of the sales receipt is required.

FOR CONSUMER USE ONLY – NOT FOR PROFESSIONAL USE.

KEEP THIS MANUAL, SALES RECEIPT & APPLICABLE WARRANTY FOR FUTURE REFERENCE.

Hydraulic Jack Operating Instructions

1. Before operating, estimate the weight of the load. Do not overload the jack beyond its rated load.
2. Select point of action according to the gravitational center. Place the jack on hard ground or place a hard plank under the jack to avoid falling during operations.
3. Before operating the jack, first insert the notched end of the handle into the release valve. Turn the operating handle clockwise until release valve is closed. Do not over tighten the valve.
4. Insert operating handle into the socket. The ram is steadily raised by the up and down movement of the handle and the load is raised. The ram will stop rising when the required height is reached.
5. Lower the ram by turning the release valve counter-clockwise with the notched end. Lower it slowly when a load is applied or accidents can occur.
6. When more than one jack is used at the same time, it is important to operate the different jacks at an equal speed with equal load. Otherwise, there is danger of falling the entire fixture.
7. Violent shocks must be avoided during the operation.
8. User must operate the jack correctly according to operating instructions: If the jack has some quality problems, it should not be operated.

1. Release valve lever
2. Base
3. O-Ring
4. Hydraulic cylinder
5. Ram
6. Hydraulic oil
7. Oil-tight tank
8. Extension screw
9. Top cap
10. Pump plunger
11. Pump Body
12. O-Ring
13. Carry Handle



Save these instructions. For your safety and the safety of others around you, read carefully before attempting to assemble, service or use your jack. Observe all safety and warning information. Always wear safety glasses when operating this product. Failure to comply with the information contained within could result in severe, even fatal injury and/ or property damage.

This Air Actuated Hydraulic Hand Jack is designed for lifting, but not sustaining, loads ranging from up to 20 tons. It can be used vertically or angled to 5 degrees from vertical position. After lifting, loads must be immediately supported by appropriate means. For use in an appropriately rated and designed vertical or bench press structure. These jacks are not recommended for use in lifting or positioning houses and/or other building structures. These jacks comply with applicable ASME/ ANSI Standards.

BEFORE USE

1. Verify that the product and the application are compatible.
2. 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.
3. Open the release valve (counter-clockwise, no more than 2 full turns)
4. 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.
5. Pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve. Connect to air supply and operate for 3 seconds to evenly distribute lubricant.
6. Check to ensure that jack pump operates smoothly before putting into service.
7. 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.

OPERATION

Lifting

1. Assemble 2 piece 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 device such as jack stand.

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 APPROPRIATE 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 WARNINGS 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 counterclockwise, but no 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.

WARNING

BE SURE ALL TOOLS AND PERSONNEL ARE CLEAR BEFORE LOWERING LOAD. DANGEROUS DYNAMIC SHOCK LOADS ARE CREATED BY QUICKLY OPENING AND CLOSING THE RELEASE VALVE AS THE LOAD IS BEING LOWERED. THE RESULTING OVERLOAD MAY CAUSE HYDRAULIC SYSTEM FAILURE WHICH COULD CAUSE SEVERE PERSONAL INJURY AND/OR PROPERTY DAMAGE

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

MAINTENANCE

Important: Use only a good quality Hydraulic Oil DTE13 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 Hydraulic Oil DTE13 jack oil. Reinstall oil filler plug.

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.

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

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

