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rangerproducts.com

30-Ton Telescoping Air Bottle Jack Installation and Operation Manual

Manual P/N 5900031 — Manual Revision B — January 2020

Model:

RBJ-30TL



Designed and engineered by BendPak Ranger in Southern California, USA. Made in China.



Read the *entire* contents of this manual *before* using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death. Make sure all other operators also read this manual. Keep the manual near the product for future reference. By proceeding with installation and operation, you agree that you fully understand the contents of this manual.

Manual. BendPak Ranger 30-Ton Telescoping Air Bottle Jack, *Installation and Operation Manual*, Manual P/N 5900031, Manual Revision B, released January 2020.

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Limitations. Every effort has been made to have complete and accurate instructions in this manual. However, product updates, revisions, and/or changes may have occurred since this manual was published. BendPak Ranger reserves the right to change any information in this manual without incurring any obligation for equipment previously or subsequently sold. BendPak Ranger is not responsible for typographical errors in this manual. You can always find the latest version of the **manual for your product on the Ranger website**.

Warranty. The BendPak Ranger warranty is more than a commitment to you: it is also a commitment to the value of your new product. For full warranty details, contact your nearest BendPak Ranger dealer or visit **bendpak.com/support/warranty**. Go to **bendpak.com/support/register-your-product/** and fill out the online form to register your product (be sure to click **Submit**).

Safety. Your new product was designed and manufactured with safety in mind. Your safety also depends on proper training and careful operation. Do not install, operate, maintain, or repair the unit without reading and understanding this manual and the labels on it; *do not use this product unless you can do so safely!*

Owner Responsibility. In order to maintain your product properly and to ensure operator safety, it is the responsibility of the product owner to *read and follow these instructions*:

- Follow all installation, operation, and maintenance instructions.
- Make sure product installation conforms to all applicable local, state, and federal codes, rules, and regulations, such as state and federal OSHA regulations and electrical codes.
- Read and follow all safety instructions. Keep them readily available for operators.
- Make sure all operators are trained, know how to safely operate the unit, and are properly supervised.
- Do not operate the product until you are certain all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with approved replacement parts.
- Keep the manual with the product and make sure all labels are clean and visible.
- Only use this product if it can be used safely!

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Introduction

This manual describes the RBJ-30TL Telescoping Air Bottle Jack, a powerful Jack that is able to raise 60,000 lbs (27,215 kg, 30 tons) at first stage and 30,000 lbs (13,608 kg, 15 tons) at second stage.

More information about BendPak Ranger products is available at rangerproducts.com.

This manual is mandatory reading for all users of the RBJ-30TL, including anyone who installs, operates, maintains, or repairs it.



Be very careful when installing, operating, maintaining, or repairing this equipment; failure to do so could result in property damage, product damage, injury, or (in very rare cases) death. Make sure only authorized personnel operate this equipment. All repairs must be performed by an authorized technician. Do not make modifications to the unit; this voids the warranty and increases the chances of injury or property damage. Make sure to read and follow the instructions on the labels on the unit.

Keep this manual on or near the equipment so that anyone who uses or services it can read it.

Technical support and service for your product is available directly from your distributor or by calling **BendPak Ranger at (805) 933-9970**.

You may also contact BendPak Ranger for consultation on parts replacement (please have the serial number and model number of your unit available).

Safety Considerations

Read this manual carefully before using your new product. Do not install or operate the product until you are familiar with all operating instructions and warnings. Do not allow anyone else to operate the product until they are also familiar with all operating instructions and warnings.

Safety Information

Please note the following:

- The product is a telescoping air bottle Jack. *Use it only for its intended purpose.*
- The product must only be used on a hard, dry, flat surface.
- Never exceed the rated capacity of the Jack.
- The product must only be operated by authorized personnel.
- When the product is in use, keep all body parts away from it.
- Do not use the product while tired or under the influence of drugs, alcohol, or medication.
- Do not make any modifications to the product.
- Make sure all operators read and understand the *Installation and Operation Manual*. Keep the manual near the device at all times.
- Make a visual inspection of the product before using it. Do not use the product if you find any
 missing or damaged parts. Instead, take the unit out of service and then contact an authorized
 repair facility, your distributor, or BendPak Ranger at (805) 933-9970.

Symbols

Following are the symbols used in this manual:

DANGER Calls attention to a hazard that will result in death or injury.

MARNING Calls attention to a hazard or unsafe practice that could result in death or injury.

⚠ CAUTION Calls attention to a hazard or unsafe practice that could result in personal injury, product damage, or property damage.

 ${f -}$ ${f Tip}$ Calls attention to information that can help you use your product better.

Liability Information

BendPak Ranger assumes **no** liability for damages resulting from:

- Use of the equipment for purposes other than those described in this manual.
- Modifications to the equipment without prior, written permission from BendPak Ranger.
- Injury or death caused by modifying, disabling, overriding, or removing safety features.
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.

Components

The major components of the Jack include:

- Handle. Lets you move the Jack around.
- Joystick. Controls the raising and lowering of the Jack.
- Angle Lever. Moves the Handle to different locking positions, making it easier to move the Jack.
- Air In Connector. Where you attach the incoming air supply.
- Quick-Connect Fitting. Attaches to the Air In Connector, making it easy to connect and disconnect the incoming air supply.
- Wheels. Let you easily maneuver the Jack.
- **Two-Stage Telescoping Ram**. Raises and lowers, holds the Saddle Pad and the Extenders. First stage rises 2.75 in / 70 mm, second stage rises 5.5 in / 140 mm.
- Saddle Pad. Contacts the Lifting Point of the Vehicle you are raising. Always use this.
- Extenders. Raise the starting point of the Saddle Pad. One medium (2.75 in / 70 mm) and one tall (4.75 in / 121 mm). They can be combined (7.5 in / 191 mm).



Specifications

Raising Capacity *	60,000 lbs / 30 tons / 27,215 kg at first stage 30,000 lbs / 15 tons / 13,608 kg at second stage		
Lowered Height (with Saddle Pad)	6.5 in / 150 mm		
Maximum Height (stacked extenders and top of second stage)	19.5 in / 495 mm		
Raising Heights	First stage: 2.75 in / 70 mm Second stage: 5.5 in / 140 mm		
Chassis Width	11 in / 279 mm		
Chassis Length (including Wheels)	22 in / 559 mm		
Air Supply	100 to 145 PSI / 7 to 10 BAR, dry		

^{*} If Vehicle being raised exceeds 30,000 lbs / 13,608 kg, do not attempt to raise to second stage.

Specifications subject to change without notice.



Never exceed the rated capacity of the Jack. If you attempt this, you could damage the Jack (which would not be covered by the Warranty as this is incorrect operation of the unit). Additionally, the Vehicle being raised could fall, which could result in damage to the Vehicle, injury, or (in rare cases) death to the operator or bystanders.

Installation

This section describes how to prepare your Jack.

Installation Safety Rules

Pay attention at all times during installation. Use appropriate tools and equipment. Stay clear of moving parts. Keep hands and fingers away from pinch points. **Safety is a top priority**.

⚠ WARNING

You *must* wear OSHA-approved (publication 3151) Personal Protective Equipment when installing, using, maintaining, or repairing the Jack: leather gloves, steel-toed boots, eye protection, back belts, and hearing protection.

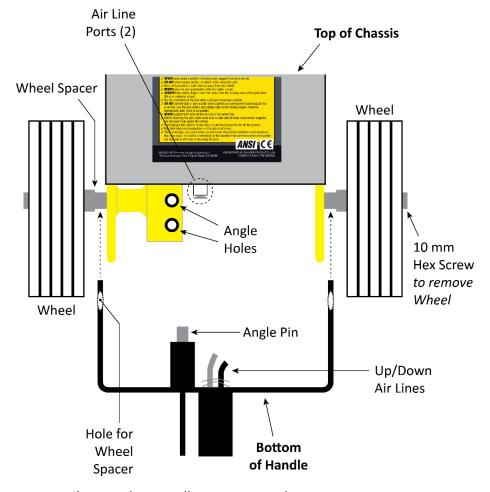
Use caution when unpacking the Jack and setting it up. The unit is heavy and the weight is not evenly distributed; dropping components could cause equipment damage and personal injury.

A CAUTION

Certain parts of installing the Jack are difficult for just one person. BendPak Ranger recommends having two or more work together to install the Jack.

Setup

The following drawing shows where the bottom of the Handle attaches to the Chassis.

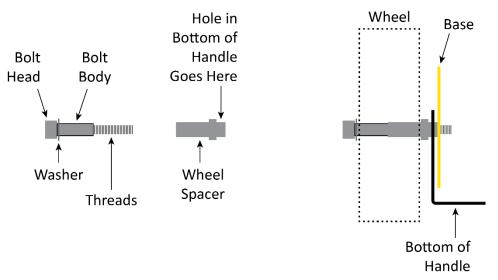


Top view. Not necessarily to scale. Not all components shown.

To set up your Jack:

- 1. Remove the components from the box.
- 2. The Handle comes folded: remove the pin, straighten out the Handle, put the pin back in.
- 3. Switching to the Wheels, remove **both** Wheels; a 10 mm hex wrench is included for this. Keep the Bolts, Washers, Wheels, and Wheel Spacers together as a unit when you remove them. You are going to be putting them back into place soon.
- 4. Put the Handle bottom into place, outside of where the Wheels connect to the Chassis.

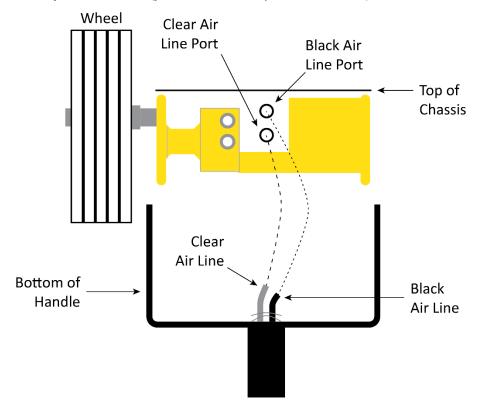
 The Angle Pin needs to be next to the Angle Holes.
- 5. Take one of the Wheels you just removed: put the Bolt and Washer into place on the outside, put the Wheel Spacer into place on the inside, then push the Wheel into place; the Threads on the Bolt must go through the hole in the Bottom of the Handle and into the Base of the Jack.



Top view. Left side shows components without the Wheel, for clarity. Right side shows components when all are in place. Not necessarily to scale. Not all components shown.

- 6. Tighten the Bolt into place using the 10 mm hex wrench.
- 7. Repeat Steps 5 and 6 for the other Wheel.

8. Switching to the Air Lines, locate the black Air Line sticking out of the Handle bottom and connect it to the *top* Air Line Port (just under the top of the Chassis).



Top and side views. Not necessarily to scale. Not all components shown.

- 9. Locate the clear Air Line and connect it to the *lower* Air Line Port.
- 10. Switching to the Angle Pin and Angle Holes, pull back on the Angle Lever at the top of the Handle (which pulls back the Angle Pin), move the Handle so the Angle Pin is over one of the Angle Holes, then release the Angle Lever.

Make sure the Angle Pin goes into the desired Angle Hole.

11. Make sure a dry air supply is available.

Recommended air pressure is 100 to 145 PSI (7 to 10 BAR). Air *must be dry*. Install an air filter/lubricator in the air line to stop water from getting to the Jack from the air line, if not already in place.

Moisture in the air line will damage the Jack; moisture damage is **not** covered by the Warranty.

Operation

This section describes how to use the Jack to raise and lower a Vehicle.

⚠ WARNING

Only use the Jack on a hard, flat, dry surface. Only raise one side or end at a time. Make sure the Vehicle does not have any people in it.

Safety Rules

Important:

Your safety depends on reading, understanding, and implementing these Safety Rules. *Do not skip over them; read them carefully and follow them!*

To use your Jack safely:

- Before using the Jack, inspect it *every time*. Check for a cracked or damaged housing, excessive wear, leading hydraulic fluid, anything loose or broken, or any other abnormalities. If you see anything wrong, take the Jack out of service, disconnect it from its air supply (if connected), and then contact an authorized repair facility, your distributor, or BendPak Ranger at (805) 933-9970.
- Never load the Jack beyond its rated capacity.
- Only use the Jack on a flat, hard, dry surface capable of supporting the weight being raised.
- Only allow trained, supervised personnel to operate the Jack.
- Only use the Jack to raise and lower a load. Once the load is raised, immediately secure it with jack stands (not supplied).

Refer to **bendpak.com/shop-equipment/jack-stands/** for more information about jack stands that are available from BendPak Ranger.

- Do not leave the Jack unattended when it has a load raised.
- Do not use two Jacks to support both ends of a Vehicle at one time.
- Other than the Operator, keep all other people a minimum of 30 feet away from the Jack while it is being used.

MARNING

You *must* wear OSHA-approved (publication 3151) Personal Protective Equipment at all times when installing, using, maintaining, or repairing the Jack. Leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection *are mandatory*.

- The Jack's Chassis is a tripping hazard. Make sure everyone who uses the Jack or works near it is aware of the Jack.
- Pay attention at all times while using the Jack. Safety is your top priority at all times.

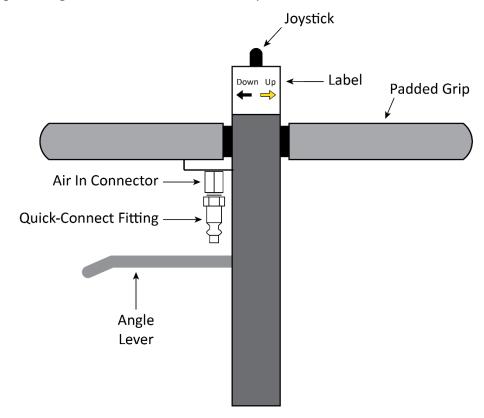
Normal Operation

The Jack requires a **dry** air supply, 100 to 145 PSI / 7 to 10 BAR.

⚠ CAUTION

The air supply *must* be dry air. If it has moisture in it, that moisture will damage the Jack. Install a filter, if necessary, to remove moisture from the Jack's air.

The following drawing shows the controls on the top of the Jack Handle.



Side and top views. Not necessarily to scale. Not all components shown.

To raise a Vehicle:

- 1. Move the Vehicle to the desired location.
- Put the Vehicle into park, put on the parking brake, and turn off the motor.
 If the Vehicle is a manual transmission, put it in a gear; do not leave it in neutral.
- 3. Block the tires *opposite* the side or end of the Vehicle being raised.
- 4. Position the Jack under the Vehicle, with the Saddle Pad directly under a Vehicle manufacturer's designated Lifting Point.

Make sure to get the Saddle Pad directly under the Lifting Point.

If there is a lot of space between the top of the Saddle Pad and the Lifting Point on the underside of the Vehicle, you can use Extenders to reduce the space.

5. Attach the incoming air supply to the Quick-Connect Fitting attached to the Air In Connector. Quick-Connect Fittings come in various sizes; you may need to replace the supplied Quick-Connect Fitting with one of a different size.

7. Move the Joystick to the Up position for two seconds, then release it.

The Jack raises the Vehicle to the **first** stage and stops; the Joystick returns to the neutral position.

⚠ WARNING If the Vehicle you are raising weighs more than 30,000 pounds / 13,608 kg, do not raise it past the first stage. You will damage the Jack.

- 8. If the first stage height is above the height of the jack stands you are going to use, place them under the Vehicle **where recommended by the Vehicle manufacturer**. Move the Joystick to the Down position and hold it there to lower the Jack until the weight of the Vehicle is on the jack stands.
- 9. If the first stage height is **not** above the height of the jack stands you are going to use **and** the Vehicle you are raising is *under* 30,000 pounds / 13,608 kg, move the Joystick to the Up position again for two seconds, then release it.
 - The Jack raises the Vehicle to the **second** stage and stops; the Joystick returns to the neutral position.
- 10. Place your jack stands under the Vehicle where recommended by the Vehicle manufacturer. Move the Joystick to the Down position and hold it there to lower the Jack until the weight of the Vehicle is on the jack stands.
- ⚠ WARNING Do not get under the Vehicle until it is fully supported by jack stands. The Jack is not designed to maintain heavy loads for long periods of time. Never put jack stands under both ends of a Vehicle at the same time.
- 11. Verify that the Vehicle is secure on the jack stands, move the Jack all the way down (if you haven't already), then move the Jack out of the way.
- 12. Disengage the air supply from the Jack.

To lower a Vehicle:

- 1. Check under the Vehicle; if there is anything under it, move it out of the way.
- Position the Jack under the Vehicle, with the Saddle Pad under a designated Lifting Point.
 Make sure to get the Saddle Pad directly under the Lifting Point.
- 3. Attach an air supply to the Jack.
- 4. Move the Joystick to the Up position and raise the Vehicle so that it is off the jack stands.
- 5. Remove the jack stands from under the Vehicle.
- 6. Move the Joystick to the Down position and hold it there.
- 7. When the Vehicle is securely on the ground, move the Jack out from under it.
- 8. Disengage the air supply from the Jack.

Maintenance

To maintain your Jack:

- **Daily**. Keep the Jack clean. Dirt, rust, and moisture can cause slow movement or rapid jerks, both of which damage internal components. Make sure all labels are in place and visible.
- Weekly. Inspect the Jack for cracked welds, hydraulic fluid leaks, missing or damaged parts.
- Monthly. Lubricate the Jack with light oil.
- Every three months. Fully clean and lubricate the Jack.
- **Storing**. Store your Jack in the fully lowered position; this protects the Jack from corrosion.

Air can make its way into the closed hydraulic system during shipment or after use, which can slow the speed of the Jack or make it feel "spongy". Purge excess air from the system.

To purge air from the hydraulic system:

- 1. Make sure there is no load on the Jack.
- 2. Move the Joystick to the Down position; hold it there for several seconds.
- 3. Raise the Jack is at its full height.
- 4. Move the Joystick to the Down position again; lower the Jack to the ground.

 The pistons should retract in a smooth motion.
- 5. If the pistons do not retract in a smooth motion, repeat the procedure.

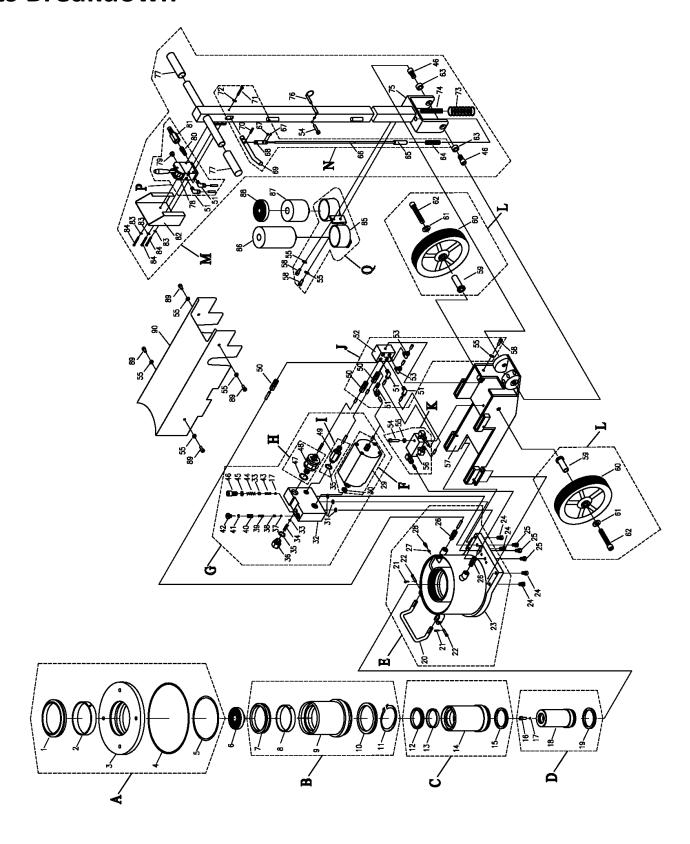
If the Jack continues to work abnormally, refer to **Troubleshooting** for additional information.

Troubleshooting

Issue	Action to Take
Jack does not raise to full height.	Make sure the load does not exceed the rated capacity of the Jack. Make sure the air lines are connected and not leaking.
Jack does not hold load.	Check for leaks in the hydraulic system; fix them if found. If hydraulic fluid continues to leak, contact BendPak Ranger. Make sure the load does not exceed the rated capacity of the Jack.
Jack does not lower.	Purge air from the hydraulic system. Make sure the air lines are connected and not leaking.
Jack feels "spongy" when raising.	Purge air from the hydraulic system.

If you continue to have problems with your Jack, call BendPak Ranger at **(805) 933-9970** or visit www.bendpak.com/support/.

Parts Breakdown



Num	Description	Qty	Num	Description	Qty
1	Dustproof ring	1	46	Allen screw	3
2	Guild ring C	1	47	Copper washer	1
3	Cover board	1	48	Release valve	1
4	O-ring	1	49	Oil flow valve	1
5	O-ring	1	50	Coupler	3
6	Adapter	1	51	Elbow coupler	5
7	Dustproof ring	1	52	Multi-routine valve	1
8	Guild ring A	1	53	Elbow coupler	2
9	Outer ram	1	54	Allen screw	2
10	Seal ring	1	55	Flat washer	8
11	Snap ring	1	56	Air valve	1
12	Dustproof ring	1	57	Connection bracket	1
13	Guild ring B	1	58	Allen screw	3
14	Big ram	1	59	Bushing	2
15	Seal ring	1	60	Wheel	2
16	Allen screw	1	61	Flat washer	4
17	Steel ball	2	62	Allen screw	2
18	Ram	1	63	Handle bushing	2
19	Seal ring	1	64	Spring	1
20	Handle grip	1	65	Pin	1
21	Clip	2	66	Control rod	1
22	Pin	2	67	Screw	4
23	Jack base	1	68	Rod	1
24	Allen screw	4	69	Handle grip	1
25	Allen screw	3	70	Pin	1
26	Coupler G1/4-8	2	72	Lock washer	1
27	O-ring	1	71	Allen screw	1
28	Allen screw	1	73	Spring	1
29	Air motor	1	74	Bellows	1
30	Copper washer	1	75	Handle	1
31	O-ring	4	76	Pin	1
32	Valve block	2	77	Handle sleeve	2
33	Steel ball	2	78	Control valve	1
34	Spring	1	79	Muffler	2
35	Copper washer	2	80	Air coupler	1
36	Spring seat	1	81	Air coupler	1
37	Steel ball	1	82	Valve board	1
38	Ball valve seat	1	83	Flat washer	3
39	Safety valve spring	1	84	Screw	3
40	Adjust screw	1	85	Saddle adapter	1
41	Safety valve seal	1	86	Adapter A	1
42	Safety valve screw	1	87	Adapter B	1
43	Spring	1	88	Adapter C	1
44	Spring	1	89	Allen screw	4
45	Copper washer	1	90	Cover	1
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