



PLEASE READ THE ENTIRE CONTENTS OF THIS MANUAL PRIOR TO INSTALLATION AND OPERATION. BY PROCEEDING YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH.

REV A 10-26-09

INSTALLATION AND OPERATION MANUAL

Aluminium Racing Jack Model: RFJ-3000AL

REV A



SHIPPING DAMAGE CLAIMS

When this equipment is shipped, title passes to the purchaser upon receipt from the carrier. Consequently, claims for the material damaged in shipment must be made by the purchaser against the transportation company at the time shipment is received.

BE SAFE

Ranger™ Floor Jacks are designed and built with safety in mind. However, proper training and thoughtful operation on the part of the operator can increase your overall safety. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.



1645 Lemonwood Dr.
Santa Paula, CA. 93060, USA
Tel: 1-805-933-9970
Toll Free: 1-800-253-2363
Fax: 1-805-933-9160
www.rangerproducts.com

WARRANTY POLICY

Ranger Products™ are backed by over 35 years of manufacturing experience. Every Floor Jack bearing the Ranger™ name is sold with the following warranty.

- ◆ Each Ranger Product™ is warranted to be free from defects in workmanship and material for a period of one year from the date of shipment provided that a written claim for such defect is made within that time.
- ◆ This warranty does not cover damage or defects caused by carelessness of the operator, misuse, abuse or abnormal use which in any way impairs the proper functioning of the equipment or by the use or addition of parts not manufactured by Ranger Products™ or its suppliers.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

If your Ranger Products™ machine is not functioning properly, call your Ranger Products™ dealer immediately. On some occasions, an independent contractor may be hired to do the repairs. Within the warranty period, a customer should not hire his own contractor unless it is authorized in writing by Ranger Products™.

If it is necessary to return equipment for repairs, your dealer will so advise you. When returning equipment for repairs, see that machines are properly crated and protected, and prepay transportation.

Defective parts replaced at no charge must be returned to your dealer or Ranger Products™ within 60 days of the date that the replacement parts are shipped; otherwise, you must pay for the replacement parts at the current selling price.

SHIPPING DAMAGE

If any damage is found, notify your carrier immediately and save all packaging materials for the carrier's inspector to examine. Failure to promptly report damage could result in denial of your claim.

A trucking company's procedure for handling damage is as follows:

1. Immediately send out an inspector. An inspection report is filled out on the spot, a copy of which is given to the customer.
2. The **customer** has to call the carrier to request a claim form.
3. The customer mails in the claim form.
4. The claim usually takes two (2) months to process.

If a unit is seriously damaged, your Ranger Products dealer may be able to intervene, requesting that the damaged unit be returned and a new unit delivered.

IMPORTANT SAFETY TIPS



**ALWAYS MAINTAIN A CLEAN WORK AREA.
KEEP VISITORS AND ESPECIALLY
CHILDREN AWAY FROM WORK AREA.**

**THIS FLOOR JACK IS TO BE OPERATED BY
PROPERLY TRAINED PERSONNEL ONLY.
OPERATION BY UNTRAINED
PERSONNEL MAY RESULT IN INJURY
AND /OR PROPERTY DAMAGE.**

For Parts Or Service Contact:

**BendPak Inc. / Ranger Products
1645 Lemonwood Dr.
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THIS OPERATING MANUAL CONTAINS IMPORTANT DETAILS CONCERNING THE SAFE OPERATION OF THIS TOOL. THE USER MUST READ AND UNDERSTAND THESE DETAILS BEFORE ANY USE OF THE TOOL. THIS MANUAL MUST BE RETAINED FOR FUTURE REFERENCE.

OWNER/OPERATOR RESPONSIBILITY:

The owner and/or operator shall study the product instructions and retain them for future reference.

The owner and/or operator shall have an understanding of the product operating instructions and warnings before operating the jack.

Warning information shall be emphasized and understood. If the operator is not fluent in English, the product instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/ owner or his designee, making sure that the operator comprehends its contents.



INSPECTION

Visual inspection should be made before each use of the jack. This inspection should check for abnormal conditions such as cracked welds, leaks, and damaged, loose or missing parts.

Any jack that appears to be damaged in any way, is found to be worn or operated abnormally, must be removed from service immediately.

Any jack that operates abnormally shall be removed from service until repaired by a qualified repair service center.

If the jack is accidentally subjected to an abnormal load or shock, it must be taken out of service immediately and be inspected by a qualified repair or service center.

It is recommended that an annual inspection is performed on the jack and that any damaged or worn parts, decals or warning labels be replaced with manufacturer's specified parts.



ALTERATIONS

Because of potential hazards associated with this type of equipment, no alterations shall be made to the product.

FOR YOUR SAFETY AND TO PREVENT INJURY:

Use Service Jack for lifting purposes ONLY.
Always support vehicle with jack stands.



WARNING!

THIS IS A LIFTING DEVICE ONLY. DO NOT MOVE OR DOLLY THE VEHICLE WHILE ON THE JACK. IMMEDIATELY AFTER LIFTING, SUPPORT THE VEHICLE WITH APPROPRIATE MEANS.

DO NOT EXCEED RATED CAPACITY. OVERLOADING CAN CAUSE DAMAGE TO OR FAILURE OF THE JACK.

LIFT ONLY ON AREAS OF THE VEHICLE AS SPECIFIED BY THE VEHICLE MANUFACTURER.

KEEP HANDS AND BODY CLEAR OF ALL PINCH POINTS.

CENTER LOAD ON SADDLE PRIOR TO LIFTING. OFF-CENTER LOADS MAY CAUSE DAMAGE TO JACK, LOSS OF LOAD, PROPERTY DAMAGE, PERSONAL OR FATAL INJURY.

THIS JACK IS DESIGNED FOR USE ONLY ON HARD LEVEL SURFACES CAPABLE OF SUSTAINING THE LOAD. USE ON OTHER THAN HARD LEVEL SURFACES CAN RESULT IN JACK INSTABILITY AND POSSIBLE LOSS OF LOAD.

NO ALTERATIONS TO THE JACK SHALL BE MADE.

READ, STUDY AND UNDERSTAND THE OPERATING MANUAL PACKED WITH THIS JACK BEFORE OPERATING.

FAILURE TO HEED THESE WARNINGS MAY RESULT IN LOSS OF LOAD, DAMAGE TO JACK, AND/OR FAILURE RESULTING IN PROPERTY DAMAGE, PERSONAL OR FATAL INJURY.

ASSEMBLY INSTRUCTIONS

1. Assemble Upper and Lower Handle, insert into Handle Socket and tighten Bolt.

OPERATING INSTRUCTIONS

BEFORE USE:

Air may become trapped in the hydraulic system during transit. To purge air:

1. Open release valve by twisting Handle counter clockwise.
2. Pump Handle rapidly 4-6 full strokes. This will expel air that may have entered oil passages during transit.
3. Close release valve by twisting Handle clockwise and pump handle.
4. If lift arm is raised, jack is ready for use. If not, repeat this procedure.



**BEFORE ATTEMPTING TO RAISE ANY VEHICLE,
CHECK VEHICLE SERVICE MANUAL FOR
RECOMMENDED LIFTING POINTS.**

OPERATION:

1. To Raise Load: Close release valve tightly (by twisting Handle clockwise. **DO NOT OVERTIGHTEN.** Position jack under load so that saddle will contact load firmly and load is centered so it cannot slip. Operate jack handle until saddle approaches the load. Once again, check to see that saddle is correctly positioned. Raise load to desired height. Place jack stands of appropriate capacity under the vehicle.



**DO NOT CRAWL UNDER VEHICLE WHILE
LIFTING VEHICLE OR PLACING
OR REMOVING JACK STANDS!**

Place jack stands at vehicle manufacturer's recommended lift areas that provide stable support for the raised Vehicle. Once jack stands are positioned, open the release valve **VERY SLOWLY** (by twisting the Handle counter clockwise.)

Lower the load to rest on the jack stands. Then, make sure that the release valve on the jack is closed tightly (twist the Handle clockwise).

2. To lower load:

Re-check to make sure release valve is tightly closed (twist the Handle clockwise). Then, operate the jack handle until the load is raised enough to remove the jack stands.



DANGER!

**DO NOT CRAWL UNDER VEHICLE WHILE LIFTING
VEHICLE OR REMOVING THE JACK STANDS!**

Once jack stands are removed, open release valve very slowly to lower the vehicle (twist the Handle counter clockwise). Lower jack completely so that the vehicle is securely resting on the ground and that jack no longer makes contact with vehicle.



CAUTION!

Keep hands or feet away from the hinge mechanism of the jack.

MAINTENANCE

When adding or replacing hydraulic fluid, always use a quality hydraulic fluid. **DO NOT** use brake fluid, alcohol, detergent motor oil, dirty oil or any fluid other than quality hydraulic fluid. Improper fluids can cause internal damage to the jack and improper or unsafe operation.

ADDING HYDRAULIC FLUID

With the saddle fully lowered and the jack on level ground, remove the filler screw. Hydraulic fluid should be filled to the level of the filler screw hole. If the level is below this hole, add hydraulic fluid as needed.

LUBRICATION

All moving joints require lubrication often. Lightly grease saddle post and saddle bottom. Remove handle and grease the lower end of handle where it rotates in the handle socket. Oil all lift arm linkages, front wheels and rear casters.

DESCRIPTION

The Ranger model RFJ-3000AL Aluminum Racing Jack is made of the strongest aircraft alloy aluminum available. Not only does it weigh in at a feather-light 39 lbs., but it gets any racecar or hotrod a full 17-3/4" off the ground in just four pumps of its knurled aluminum handle. With a low 3-1/2" profile front-roller, the RFJ-3000AL is perfect for working on ground-hugging, low ground-clearance performance vehicles.

FEATURES

- Lightweight for easy portability
- Aircraft grade billet aluminum design
- Low profile single piece front roller
- Oversized knurled aluminum handle
- Fast 4-pump operation gets cars up quick
- Reaches full lifting height with just four pumps
- Dual-plunger pump assembly
- Roller-cam plungers and u-joint release
- Alloy-plated ram
- Double-sealed hydraulics for longer service life
- Built-in safety overload valve

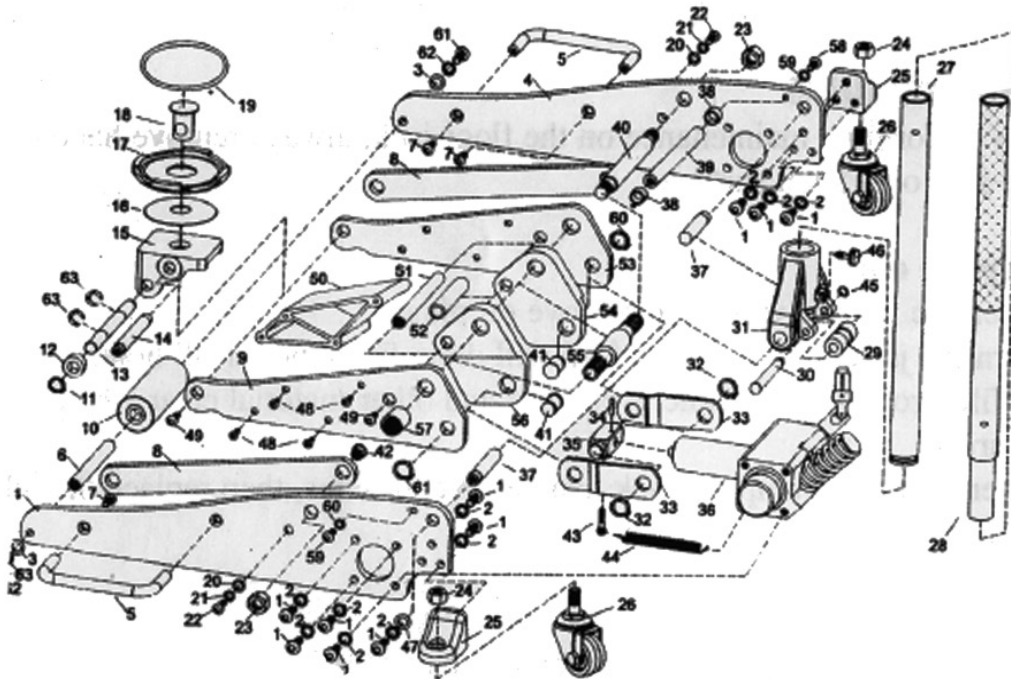
SPECIFICATIONS

Maximum Capacity	3,000 lbs / 1361 kg.
Maximum Saddle Height	17.75" / 451mm
Minimum Saddle Height	3.5" / 89mm
Overall width	11.75" / 298
Chassis Length	24" / 610mm
Shipping Weight	42 lbs. / 19kgs.
Shipping Dimensions	29" x 13" x 7" / 737 x 330 x 178mm

TROUBLESHOOTING

PROBLEM	ACTION
1. Unit will not lift load	Purge air from hydraulic system by following procedure under OPERATING INSTRUCTIONS.
2. Unit will not sustain load or feels "spongy" under load.	Purge air from hydraulic system as above.
3. Unit will not lift to full height.	Purge air from hydraulic system as above. Check to be sure oil level is not too high or low.
4. Unit will not lower completely.	Check oil level. Make sure not overfilled.
5. Handle tends to raise up while the unit is under load.	Pump the handle rapidly several times to push oil past ball valves in power unit.
6. Unit still does not operate.	Contact Parts & Warranty Department.

PARTS BREAKDOWN



No. Description	No. Description	No. Description
1 Bolt	22 Bolt	43 Bolt
2 Gear washer	23 Lock nut	44 Return spring
3 Washer	24 Lock nut	45 Snap ring
4 Side plate	25 Caster bracket	46 Handle set screw
5 Carry handle	26 Rear caster assembly	47 Washer
6 Front wheel axis	27 Lower handle	48 Bolt
7 Bolt	28 Upper handle	49 Bolt
8 Link rod	29 Roller	50 Connect plate
9 Left plate - lifting arm	30 Roller axis	51 Connect shaft
10 Front roller	31 Handle base	52 Connect bushing
11 Snap ring	32 Snap ring	53 Right plate - lifting arm
12 Space washer	33 Pull Rod	54 Plate A-arm
13 Link rod axis	34 Spring pin	55 Bushing arm
14 Saddle base axis	35 Connect rod	56 Plate B-arm
15 Saddle base	36 Power unit assembly	57 Nut
16 Washer - saddle	37 Handle base axis	58 Bolt
17 Saddle	38 Space limiting pin	59 Washer
18 Saddle pin	39 Limiting pin	60 Snap ring
19 Rubber pad	40 Lifting arm axis	61 Bolt
20 Washer	41 Shaft-pull rod	62 Spring washer
21 Spring washer	42 Bolt link rod	63 E-ring



The best automotive service equipment on the planet.

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